A UNITED STATES DEPARTMENT OF COMMERCE PUBLICATION

Incorporating *International Commerce*

DECEMBER 13, 1971

# Commerce Today

## Coming Developments in Business and Technology

## Brighter Future For Christmas Shoppers

# Dispelling Some Myths

*(This column was written by Robert A. Podesta, Assistant Secretary of Commerce for Economic Development.)*

It has been observed that the greatest enemy of truth is not the lie, but the myth.

The advance of knowledge dispels myths, but when knowledge is incomplete, an atmosphere is created in which new myths arise as older ones die.

Today this is happening in the midst of a tide of economic, social and technological change unprecedented for its variety and accelerating pace—change which confronts the Nation with challenges that no one anticipated a decade ago. It seems the more we learn, the more we have to learn.

Some of the myths we encounter today are that economic progress and environmental protection cannot coexist; that the problems of our cities cannot be rolled back; that government cannot cope with today's demands; that the concept of balanced national development is an idle dream; that we have lost control of our future.

We in the Commerce Department's Economic Development Administration are fortunate to have a special vantage point from which we can gain some insight into a broad range of national concerns as they are reflected at the local level.

These concerns include education, housing, manpower development, transportation, the environment, equal opportunity, population growth and distribution, and the efficient use and conservation of natural resources. All are intimately linked to and interact with economic development, and this is where EDA comes in; our mission is to help distressed American communities revitalize their economies and generate new jobs through industrial and commercial growth.

Economic progress—new businesses, new jobs, new revenues to provide the services necessary for a higher quality of life in a community—is at the core of social progress.

Experience shows that the decisions which affect a community must come from and have the support of that community. Obviously, wise decisions cannot be made in the absence of knowledgeable planning—planning centered on total community development; planning which reflects the realization that everything is related, and very often in subtle and complex ways.

Optimism is a vital antecedent of planning. Optimism gets results. The communities where things do happen are the very communities where people want things to happen, where people are willing to work together, to seek new knowledge, to court beneficial change.

Poets are popularly regarded as an impractical breed, yet it was Goethe who counseled, "without haste, but without rest." This axiom should be applied at all levels and in all fields.

From Adam to Galileo to Darwin to Einstein, the search for new knowledge and understanding has always been a hazardous undertaking. But it is a search no generation can abandon, especially when it is fashionable to issue declarations of doom that are high in volume but low in substance.

To eliminate our myths, we must continue to pursue the knowledge and sense of proportion necessary to shape a better future for all Americans. And we will succeed, because it is and always will be man's nature to look at himself and his world with curiosity, and thereby to increase his understanding of both.

Robert A. Podesta

# Commerce Today

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Vol. II, No. 5, December 13, 1971

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**COVER:** *Christmas comes again and shoppers are jamming department stores across the nation seeking just the right gift for Aunt Sally and Uncle Clem. Story on Page 4 tells how some businessmen have found new methods to assist today's buyer in the market place.*

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ECONOMIC
HIGHLIGHTS

# Strong Rise In Business Expenditures Will Provide Boost To 1972 Economy

*Economic Highlights is prepared by Dr. Harold C. Passer, Assistant Secretary for Economic Affairs, and is based on the latest economic indicators (see charts on adjoining page).*

The nation's businessmen plan to increase their plant and equipment expenditures in 1972, providing economic impetus in a major sector that has been sluggish for about two years. Spending on fixed investment is an important source of demand in the economy, along with consumer and Government expenditures, and the programmed increase adds further luster to the prospects for vigorous economic growth in 1972.

In responding to the quarterly Government survey, businessmen said that their outlays for plant and equipment would rise from an annual rate of $80.8 billion in the third quarter to $84 billion in the fourth quarter. They anticipated that outlays would reach a rate of $88.5 billion by the second quarter of 1972, or about $7 billion (8.5 percent) higher than the preliminary figure for the full year 1971.

Business spending on investment sometimes changes dramatically from year to year in response to business cycles and other economic factors. During the 1970 slowdown, however, business capital outlays continued at a high level although they did not add a great deal to the demand forces in the economy. The increase of about 8.5 percent now projected for mid-1972 compares with gains of 5.5 percent in 1970 and 2.2 percent in 1971.

The results of the most recent survey are consistent with other indications of renewed business confidence. Private surveys also have shown strong gains in capital spending; and new orders for producers' capital goods increased to a new high in October.

Following a general downtrend over the past two years, capital spending projections by manufacturing industries registered gains for the fourth quarter of this year, with the higher level scheduled to continue during the first half of 1972. The projected increase from the 1971 level to mid-1972 is only about 3 percent, however, compared with an 11.5 percent gain in the non-manufacturing sector. Large gains are programmed by public utilities and communications firms.

Actual spending by business may turn out to be even larger than presently projected. Capital programs often are increased beyond projections during expansionary phases of the business cycle. In addition, the current projections may not yet fully reflect the New Economic Policy, which included measures to stimulate business spending. Some companies may be waiting until the Administration tax proposals are enacted into law before embarking on new or enlarged capital programs.

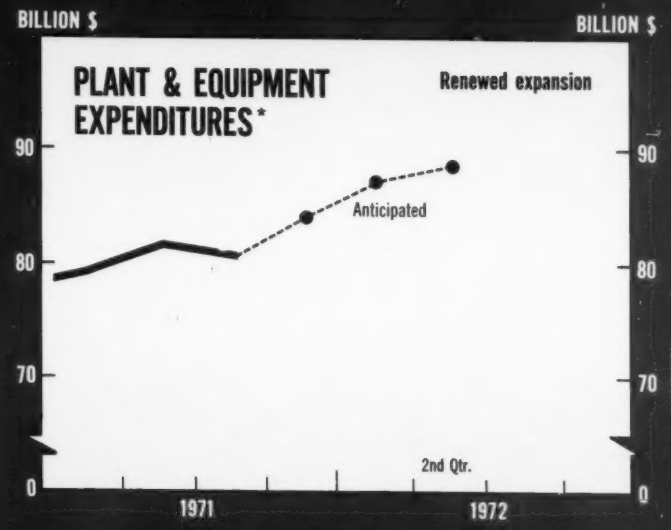
## Other economic data

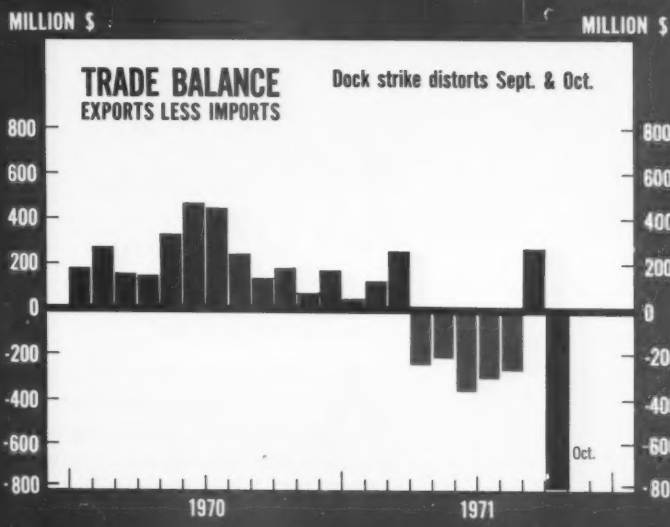
The composite index of leading business indicators continues to point upward. It advanced 1.2 percent in October, and the only decline over the past 12 months was a 0.1 percent dip in June.

Trade figures in both September and October were affected by the labor troubles on the docks. The deficit obtained by averaging these two months is about the same as the average for the previous five months. It now seems certain that there will be a substantial trade deficit for 1971 as a whole.

While unemployment stubbornly continues to hover around the 6 percent rate, the number of persons at work increased for the fifth straight month in November and is now more than 1.5 million above the June level.

# Latest Indicators





*Annual rates

All data seasonally adjusted

**Commerce Today**
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# New Channels Open To Aid U.S. Consumers

## *Better Buying Knowledge For Its Customers Part Of Business Plan To Assist Shoppers*

As shopping hits its peak during this Christmas season, business and industry are meeting the challenge of the consumer's voice—proving to buyers across the Nation that business does care and wants to be of assistance in the overwhelming marketplace found in America.

The retailers, the service industries, firms who deal in any way with sales to the public are responding in ever growing numbers. Evidence of their awareness and their desire to help is piling up daily:

- The J. C. Penney Company, with 1,700 stores, offers a unique program for educators, meeting with them at local levels to offer a wide variety of consumer education materials from consumer buying guides on specific items such as shoes and tires, to filmstrips and teaching units on broad topics such as textiles. These materials are published with a minimum of identity and with the express purpose of teaching the U.S. consumer how to buy wisely.
- Stop & Shop Companies, Inc., has established a Consumer Board of Directors to sound out shoppers on local problems and suggestions which it can incorporate into its policies.
- California Loan and Finance Association has developed a program on personal fi-

**CHRISTMAS IN THE MARKETPLACE**—*Retailers are working to make Christmas shopping a pleasant experience, not only by beautifully decorating stores, but by teaching consumers how to shop to make their dollars go further. Making buying a better experience for shoppers is not being limited to Christmas. Retailers are banding together to work out sincere year-round assistance for their customers.*

nancial planning to help families avoid over-indebtedness and get the most for their incomes.

- The Los Angeles Area Chamber of Commerce has set up a series of consumer dialogue conferences in which consumers discuss grievances, problems and solutions with industry representatives. The panels are made up of a broad cross-section of public consumers and representatives of businesses and retailers. To date they have covered electronics, pharmaceuticals, drugs, food processors, grocers, advertising and packaging.
- Jewel Companies, Inc., and Giant Food, Inc., and the Kroger Co. have led the way in introducing unit pricing, open dating and nutritional labeling to grocery retailers. Jewel is also pioneering competitive prescription drug pricing.
- Motorola has begun a program of competition based on servicing, and is evidencing strong support of consumer legislation.
- American Motors has not only reduced its warranty language to a simplified level, but has liberalized that warranty to take care of the entire car (except for normal maintenance) for 12 months or 12,000 miles (whichever comes first). Customers who have to leave their cars at American Motors dealers overnight, or for longer than a day, also are given the loan of a car by the dealer until they pick up their own automobile.

"Business is interested in doing something real and visible in the area of consumerism," asserts Willam D. Lee, Deputy Assistant Secretary of Commerce and Executive Director of the National Business Council for Consumer Affairs.

"Although, the ethical, aggressive businessman operates to the letter of the law in his offering of products and services," Lee stated, "and, in reality, the letter of the law happens to be the minimum, businesses today are doing much more than these minimum legal requirements in helping the consumer to make better buying choices and to be better served."

Lee pointed out that the Council is "perhaps the most important new forum where the business community can work with gov-

**CONSUMING BY MAIL**—*A small mountain of mail moves through the shipping department of Sears, Roebuck and Company mail order houses every day.*

ernment to address serious problems of consumerism. The Council specifically endorses consumerism and the growing, positive consumer expectations that it represents."

From early sessions with the new Council, Lee observed that the "businessman is very desirous of doing what needs to be done in improving communications in the marketplace."

Nationally, trade and professional associations have taken aggressive leadership in creating imaginative programs to help member companies deal with problems of consumerism. Many associations sponsor consumer advisory panels which serve as a direct voice of the consumer and offer a channel for resolving complaints.

The advisory panels, usually comprised of educators and consumer experts, counter a chief consumer activist complaint about the absence of channels of communication between consumers and the business community.

Major Appliance Consumer Action Panel—MACAP—sponsored by the Association of Home Appliance Manufacturers, Gas Appliance Manufacturers Association, and the American Retail Federation, is among the most comprehensive success stories in this area.

MACAP studies the broad spectrum of consumer rights, solves consumer complaints and review the causes of the complaints. The panel also conducts special studies and makes recommendations to consumers.

Its recommendations give the consumer helpful advice on how to get maximum satisfaction from appliances, appliance service tips and what to know about warranties.

MACAP plans a step further into the future of consumer assistance with a production of consumer aids. The first will cover "Functions of MACAP" and "Recommendations on Warranties." The aids, which will be distributed for classroom use, will consist of flip-charts, slide presentations and transparencies for overhead projection.

***The National Business Council for Consumer Affairs functions is a catalyst for industry action on consumer problems. It was created by Executive Order of President Nixon and placed under the leadership of the Secretary of Commerce.***

***The 116-member Council, which includes leading representatives of business and industry, operates through subcouncils on specific problem areas in consumer affairs. They are advertising and promotion, packaging and labeling, warranties and guarantees, credit and related terms of sale, performance and service, product safety, and complaints and remedies.***

***Chairman of the Council is Robert E. Brooker, chairman of the executive committees of Marcor, Inc., and Montgomery Ward. Donald S. Perkins, chairman and chief executive officer of Jewel Companies, Inc., is co-chairman.***

Other associations, including the National Retail Merchants Association, have developed widely used consumer information programs to facilitate the buyer's marketplace decision.

The Council of Better Business Bureaus, Inc., is the pioneer of workable complaint handling and mediation systems. Services of the CBBB and the American Arbitration Association are available to companies interested in establishing a consumer mediation system.

Any mediation system would of necessity vary widely from industry to industry. The National Institute of Dry Cleaning has an effective complaint fact-finding procedure which aids in resolution of consumer-business disputes. Member dry cleaners send garments that are the source of consumer complaints to an analysis laboratory for testing. The tests attempt to determine whether the responsibility for the customer's dissatisfaction lies with the member, the

manufacturer of the garment or the consumer.

Three associations in the home furniture industry have combined technical expertise in fabrics testing and standard development to formulate cleanability standards and voluntary care labeling programs. The participants—National Association of Furniture Manufacturers, Southern Furniture Manufacturers Association and National Home Furnishings Association—also have a follow up program involving standards for wearability.

## Retail assistance

Retailers have done more to help consumers, Lee noted.

For example, a pilot program of the J. C. Penney Company, Inc., takes consumer education to a leading source—the teachers colleges—enlisting educators who are teaching future home economics teachers in a unique effort to improve consumer knowledge. The "cooperative venture in consumer education" started in New York City last summer, under the sponsorship of five universites and the Penney Company.

*—National Council for Consumer Affairs*

**WINDOW SHOPPERS**—*A group of boys with their fathers, watch a window display of a train set at a Third Avenue shop in New York.*

**YOUTHFUL SHOPPERS**—*Two young shoppers are shown selecting a special gift for a relative. Many stores offer special consumer services to youthful shoppers selecting gifts for parents and friends.*

# Ice Control Explored In Effort To Extend Great Lakes Shipping

## *Methods Sought To Keep Ports Open During Winter To Stimulate Commerce, Aid Economy*

When winter comes to the Great Lakes, industry and commercial shipping face the inevitable three-month curtailment of traffic along the Great Lakes-St. Lawrence Seaway System as ice builds up threatening navigation.

Steel companies stockpile iron ore from the northern ranges to see them through the winter freeze. International shippers customarily schedule their business around the winter season which usually extends from January through March.

This is the industrial heart of the U.S., where industry and business accounts for 43 percent of the gross national product. The six Great Lakes border states, western Pennsylvania and New York account for 36 percent of U.S. manufacturing and 39 percent of manufactured exports in terms of dollar value. This area sells 23 percent of U.S. farm products and produces 67 percent of the nation's steel.

An extension of the navigation season would contribute importantly to the economic well being of the area and the nation as a whole.

The problem is one on which the Government is hard at work.

### 300 million tons

Today three hundred million tons of goods are transported on the Great Lakes annually. One-fifth of all U.S. domestic tonnage and one-eighth of U.S. foreign traffic is carried there. The port of Chicago, like Detroit, Duluth-Superior, and Toledo, an international port since the opening of the St. Lawrence Seaway, handles about 50 million tons a year alone.

Extending the navigation season would make more effective use of ships on an

**LATE RUNNERS**—*A Coast Guard icebreaker (far right) assists the ore carrier* Cason J. Callaway *through a Lake Superior ice field. Icebreakers are stationed around the lakes to aid late-running ships trapped by the ice. But most of the late fleet is in winter anchorage. Scientists are seeking means to open the Great Lakes-St. Lawrence Seaway to year round navigation to bolster the economy of the area.*

annual basis, reduce storage costs associated with stockpiling, reduce the cost of carrying large inventories, allow more efficient operation of terminal and production facilities, and expand income and employment for the entire region served by the Great Lakes ports.

Once winter hits, most of the lakes become a silent wasteland of ice. Lake Superior in February resembles the North Pole. U.S. Coast Guard ice breakers stationed around the lakes aid late-running ships trapped by the ice and maintain certain limited areas of the lake in navigable condition. Most of the lake fleet is in winter anchorage at various points around the lakes.

The effects of winter ice are not limited to shipping interests. Constantly shifting ice tears docks and pilings from their foundations and gouges beaches. In spring, massive ice jams block rivers and the channels connecting the lakes. Such jams can actually stop the flow of water in a river, causing extensive flooding in low lying areas.

Why and how does ice form in a body of water the size of one of the Great Lakes?

Where does the ice travel during the course of the winter?

What causes ice to cover more extensive areas and be thicker in some years than in others?

How and why does ice decay?

The answers to these questions are being sought by the scientists and engineers of the Lake Survey Center's Lake Hydrology Branch, a part of Commerce's National Oceanic and Atmospheric Administration.

## Observation programs

Through programs of observation and laboratory research the answers are slowly becoming clear.

For the past several years, the phenomena of ice formation, growth, and decay have been studied in detail by the Lake Hydrology Branch. The scientists have found that ice begins to form when the air temperature is well below freezing and the water temperature is close to freezing, and that the best conditions for ice formation are a clear, cold night with little or no wind.

Ice forms first in sheltered areas along the shore of the lake and is called "shore ice." Winds and waves break it up, forming ice floes. Driven by wind and current, the ice floes drift around the lake and as they drift,

**ICY CAMPSITE**—*Government technicians establish their base camp on an ice sheet in order to study the ice at close range. Such field crews travel on the ice using snowmobiles, skis, and snow shoes and sleep in polar tents. They measure ice thickness and water temperatures using chain saws to cut samples.*

they grow in size. Wave spray freezes on the floes and some may freeze together, forming larger floes. Eventually the lake is covered with large and small masses of drifting ice.

Small floes bump into larger floes and freeze to the larger floes. Eventually an ice sheet is produced. The sheet drifts until it becomes stranded in shallow water close to shore. By this process, vast areas of the lakes become covered by drifting and solid ice. What appears on the surface to be a dull, featureless ice sheet is really a highly intricate thing.

For several years, Lake Hydrology Branch personnel have been studying the ice sheet of Whitefish Bay in Lake Superior. The field crew travels on the ice using snowmobiles, skis, and snow shoes, and camps out on the ice in polar tents. Shelters containing meteorological instruments are set up around the shores of the bay to measure temperature, winds, humidity, snowfall, and sunshine during the field season.

At work on the ice, the field team measures ice thickness and water temperatures. Team members use chain saws to cut samples from the ice sheet—samples that may be two feet square on top, more than three feet thick, and weigh 70 to 80 pounds. After locations have been recorded and top ends of the samples carefully labeled, the blocks are packed in burlap bags. In the past, scientists also collected water samples from below the ice to monitor the water quality of the bay during the winter.

The ice samples are destined for the laboratory in Detroit, where they undergo crystalographic analysis. In the laboratory, the samples are stored in a walk-in freezer, constantly kept at 30 degrees below zero. Connected to the freezer is the "cold room," where the temperature is maintained between 15 and 20 degrees above zero.

Working in the cold room, scientists measure and photograph the ice samples. First, a large block is cut into small, workable pieces on an ordinary band saw. Thin sections of the ice are made, in much the same way as are geological or biological thin sections. A small piece of ice is mounted on a glass slide and shaved to a few thousandths of an inch thickness with a microtone.

To study the orientation of the ice crystals, the thin sections are examined under polarized light. The crystals have an astonishing range in size. The smallest may be less than a tenth of an inch in diameter, while a large crystal may be more than three feet long. By studying the crystal orientation, the scientist can determine how the ice grew. They also examine bubbles and dust trapped in the ice.

## Identifying patterns

With ice crystal structure data and records from the meteorological instruments, certain patterns and relationships between weather and ice formation can be identified.

Studying the distribution of ice in the Great Lakes often requires a view from above. Lake Survey scientists have several ways of achieving this view. Pictures from NOAA weather satellites are used to identify large areas of ice cover. High-altitude aerial photographs provided by the U.S. Air Force are made into mosaic maps of certain areas in the lakes and the connecting channels.

After the initial ice cover has formed, usually by the end of January, Lake Survey technicians take to the air armed with field glasses, cameras, tape recorders, special lake charts, and "long johns," in their own program of aerial ice reconnaissance. With the aid of the U.S. Coast Guard, Lake Hydrology personnel fly over and around the lakes. During these flights, they map the ice cover using a special set of descriptive symbols. Features of the cover are described on tape, and any unusual aspects are photographed

for future reference. The information obtained from the flights is then compiled into ice charts.

Ice charts are distributed during the winter months to shippers and the Coast Guard for navigational use. Hydroelectric power plants, which produce low-cost electricity for both industry and private use, also use the charts in adjusting their ice booms, to prevent ice being taken into the turbines. At the end of the ice season, information from the ice flights, ground observers, the Coast Guard, and the Canadian Department of Transport is compiled into a report of the ice characteristics for that winter. These summary reports are used to detect patterns in the formation and breakup of the Great Lakes ice cover. Other researchers use the reports in investigating circulation patterns and lake energy balance.

## Considerable attention

The possibility of winter navigation on the Great Lakes is attracting considerable attention these days. The problem is principally one of maintaining the channels and rivers connecting the lakes in an ice-free condition. Away from shore, ice cover is usually rather open and generally can be navigated. At harbor and channel entrances, as well as in rivers, ice poses a problem to navigation. In the past, ice breakers have been used exclusively to keep critical areas ice free. Research in Whitefish Bay, however, has uncovered some evidence to indicate that breaking the ice cover may only serve to thicken it. Although more research on the subject is needed, preliminary results seem to show that very thick pressure ridges may form along the tracks of the ice breakers. Broken pieces of ice pushed onto the solid cover also serve to thicken it.

Bubbler systems and dusting techniques have been studied as alternate ways of keeping lake areas ice-free. Both methods have been used with varying success in other countries. Simply described, a bubbler system is a long, plastic pipe with small holes along the top, placed on the bottom at the harbor entrance. Air is blown into the pipe and bubbles through the holes. As the bubbles rise to the surface, they create an upwelling of water from the bottom, which is warmer than the surface water. Thus, the surface water of the harbor is warmed, and ice formation is prevented.

Dusting is most often useful in the spring, to hasten breakup of the ice cover. A thin layer of some heat-absorbing material is spread over the ice surface; the material absorbs heat from the sun and warms the ice to the melting point. In some countries finely ground coal is used for dusting. Chemicals such as rock salt or ammonium sulfate are not used because of possible harm to the water quality. Several possible materials for use in dusting are being investigated. The ideal material must have high heat-absorbing capacity, but still be non-polluting.

Lake Survey's basic research into ice phenomena produces data that is essential to others involved in problems of ice and ice control. The U.S. Army Corps of Engineers, long a leader in Federal navigation improvements, is the agency charged with engineering feasibility studes, and the U.S. Coast Guard, with its fleet of ice-breakers, has for years been vital to early and late navigation on the lakes. These governmental units, and certain private interests including some universities and colleges, are working together to solve this age-old problem.

The economic benefits of large-scale winter navigation would be tremendous and, if the goal can be reached, would provide a marked stimulus to water-borne commerce. But Mother Nature will be a determined and stubborn adversary and much work remains to be done. —*NOAA*

**POLAR EXPLORERS**—*Looking like explorers of the polar ice cap, two Government scientists survey the ice field of Lake Superior. They stand on a large ice floe which develops when wind and wave combine to build up sections of the lake surface sheet ice.*

# New EEC–Larger Market But Stronger Competitor

## *Analysis Of U.S. Relationship With Original Six Can Be Guide To Future Trade Developments*

With an expansion in its membership imminent, the European Economic Community (EEC) will become an even more important trading partner for the United States as both customer and supplier. By the same token, the growing industrial capability of the member states will intensify the competition American manufacturers face in third countries as well as in the U.S. market.

Launched by the Treaty of Rome in 1957, the EEC, or Common Market, has established itself as the most successful of the several regional trading groups that came into being during the past 15 years. As U.K. accession becomes a reality and Ireland, Denmark, and Norway follow suit, the EEC, already accounting for nearly one third of the world's exports, will supply more than two fifths of the total.

Moreover, its association with many of the former European colonies in Africa, with several Mediterranean countries, and with other present and ex-dependencies elsewhere has further enhanced the EEC trade role.

In view of the expanding character of the Common Market, it is useful to examine the pattern of trade relationships that has developed between the United States and the charter members of the group, particularly since 1965 by which time their internal tariffs had been significantly reduced. This experience can serve as a guide to future trade trends.

Since 1957 when the original Common Market members—the Federal Republic of Germany, France, Italy, the Netherlands, Belgium, and Luxembourg—agreed to remove by degrees all restrictions on trade among themselves and to integrate their economies, the EEC has solidified its position as the world's largest market and widened its lead as principal supplier.

From 1965 to 1970, intra-EEC exports more than doubled to account for nearly 16 percent of the free-world total and just under half of the Community's overall shipments. Five years earlier, comparable ratios had been less than 13 percent and under 44 percent, respectively. During the same period, EEC economic growth increased roughly twice as fast as that of the United States. Gross national product in the Six climbed by 29 percent compared with only 17 percent for this country.

The exchange of goods between the United States and the EEC from 1965 to 1970 grew moderately faster than this country's trade with the world at large. U.S. exports to the Six rose by three fifths to $8.4 billion while imports doubled to $6.6 billion.

This flow of trade represented nearly one fifth of U.S. total sales to world markets and only a slightly lower proportion of its imports. In 1970, it contributed $1.8 billion to the U.S. overall trade surplus of $2.7 billion.

For the first nine months of 1971, U.S. imports from the EEC grew faster than exports on a seasonally adjusted basis, reducing the surplus in this trade to about $700 million at an annual rate.

The U.S. share of total EEC imports has diminished in recent years as trade among the Six expanded rapidly. The decline from 11.6 percent in 1965 to 10.2 percent in 1970 extended to all members except Belgium-Luxembourg. On the other hand, the U.S. portion of EEC purchases from outside the Community held even, hovering just under 20 percent.

In 1967 and again in 1970 and 1971 when the rate of increase in EEC industrial production slackened, total imports slowed. In 1967, the Community's intake of U.S. goods also fell, and in 1970, following strong gains in the first half of the year, purchases from this country leveled off.

Early in the second half of the sixties, economic growth in the EEC slackened mainly because of business slowdowns in Germany and France. By 1968, however, a new expansionary cycle was under way in most of the EEC and demand for U.S. goods began to move strongly upward except in Italy.

## GNP grows sharply

Despite Italy's economic difficulties, developments in other member countries led to a sharp increase in the real GNP of the total EEC between 1968 and mid-1970. The vigorous rate of growth tightened supplies and strained productive capacity, thus stimulating sales of U.S. capital equipment and, to a lesser extent, industrial materials.

These trends since 1965 led to a considerable rise in the share of capital goods in overall U.S. exports to the EEC. These goods also represented an increasing proportion of the Community's capital investments. Shipments of industrial supplies, meanwhile, held relatively steady as a part of total U.S. deliveries, as did the much smaller group of consumer products. By contrast, the role of foods, feeds, and beverages steadily declined.

These changes generated only minor readjustments in the geographical distribution of U.S. exports to the Community; Germany remained the top EEC outlet and Belgium-Luxembourg grew in importance. Italy, France, and the Netherlands, on the other hand, decreased relatively as markets.

**HEADQUARTERED IN BRUSSELS**—*This view of Belgian capital centers on the Berlaimont Building, where EEC has its offices. EEC statistical and other publications may be obtained in Washington, D.C. (2100 M St. NW.) from European Community Information Service, which provided photo.*

Although economic conditions were the key dynamic determinant in the growth of U.S. exports, several institutional factors also played a significant role in shaping EEC demand for this country's goods. Principal among these were the EEC's removal of internal tariffs, the establishment of the common external tariff (CXT), and the promulgation of the Common Agricultural Policy (CAP).

According to the consensus of several studies, the elimination of intra-EEC barriers and the realignment of national tariffs, both of which became fully effective by mid-1968, have led to only a moderate diversion in U.S. industrial exports. Much of this loss was offset by additional sales generated by economic growth. The implementation of the CAP, however, is generally considered to have seriously hurt U.S. agricultural sales.

In addition, U.S. exports were affected by the large investments made by American firms in manufacturing facilities in the EEC. The net effect on these shipments, however, is difficult to determine. While some exports were displaced by sales of the several thousand U.S. affiliates, others, including parts and components for assembly and semi-finished items, were expanded.

Machinery played a key role in the expan-

sion of U.S. sales to the Common Market since the mid-sixties. Exports of these products were sluggish at the outset of the period but gained momentum as economic conditions in the EEC improved, doubling to over $2.2 billion in 1970. As a general rule, the strongest growth in this product area occurred in those groups of items incorporating a high degree of technology and in those being shipped out for assembly or processing.

Booming sales of computer hardware typified the pattern set by U.S. exports of sophisticated items. Shipments of electronic computers, parts, and accessories rose from $83 million in 1965 to almost $400 million in 1970. This increase accounted for more than one fourth of the dollar gain in U.S. shipments of machinery to the EEC. A widening of business, government, and scientific uses of computers stimulated demand for large systems made in the U.S., especially lately.

In addition, stepped-up assembly operations by U.S. subsidiaries producing data processing hardware resulted in increased shipments of parts and peripheral equipment. The prime market was Germany, after the United States the main user of such hardware.

Spurred by the modernization of industrial production techniques, increased emphasis on research and development, and the intensification of automation, U.S. sales of measuring and controlling instruments to the EEC approached $300 million in 1970. Exports of electronic components also grew substantially. Despite expanded production, manufacturers in the Common Market have been unable to keep up with rising requirements. As a result, U.S. deliveries tripled over the period to nearly $150 million.

Shipments of telecommunications apparatus, consisting mostly of navigational aids and electronic search and detection equipment, also rose, partly reflecting the strengthening of the NATO infrastructure.

Exports of mechanical handling equipment and also tractors were destined primarily for manufacturing affiliates in the EEC. Deliveries of both classes of items exceeded $100 million each in 1970. Exports of office machinery other than computers, electric power machinery and switchgear, and pumps and centrifuges all more than doubled.

U.S. exports of transport equipment to the EEC, which exceeded $700 million in 1970, were predominantly civilian aircraft and parts. In addition, U.S. companies sold substantial quantities of aircraft engines and engine parts.

The initial deliveries of the new jets to foreign carriers were primarily responsible for the rise in sales in 1970. Ten of these aircraft, each of which cost in the order of $22 million or more, were delivered to the EEC countries in 1970. France took four and Belgium, Germany, and Italy two each. The United States remains the sole supplier of long-range civilian aircraft to the Common Market but may face stiffer competition in other types.

## U.S. chemical sales lag

Chemicals were the slowest rising products among U.S. manufactured exports to the EEC between 1965 and 1970. Sales, nevertheless, rose by 70 percent to $946 million, with much of the gain concentrated toward the end of the period. Organics remained the single largest item in this class, accounting for nearly two fifths of U.S. deliveries even though advancing much less rapidly than other chemicals. This sluggishness stemmed primarily from higher EEC production and intensified competition both from locally owned firms and from U.S. subsidiaries.

Investment in the Common Market by U.S. chemical companies has risen rapidly in recent years, particularly in the areas bordering the ports of Antwerp and Rotterdam. Production in the new plants is heavily oriented toward organics, especially petroleum derivatives for the plastics industry.

The rapid acceptance and widening use of plastics created a strong EEC demand, with the result that U.S. sales of plastics and resins topped $170 million in 1970. Exports of medicinal and pharmaceutical products and inorganic chemicals also grew rapidly.

## Sales of steel, coal soar

The boom in economic activity during 1969 and continued high output in 1970 pushed EEC steel consumption to record levels. The area's steel industry was unprepared for the sudden expansion and had to look abroad for supplemental supplies of steel and steelmaking materials. As a result, U.S. exports of steel and coking coal soared.

After remaining below $50 million annually through 1968, U.S. shipments of iron and steel-mill products jumped to $242 million in 1970. Most of the increase consisted of primary forms, although a substantial volume of specialty steel was included.

Under the aegis of the European Coal and Steel Community, a significant part of coal production in the Common Market is subsidized to improve productivity and the well-being of miners. A contraction in consumption during the mid-sixties depressed the market for both domestically produced and imported coal. But the sharp upturn in demand at the close of the decade outstripped the supply from Community sources and stimulated imports. U.S. sales, which had progressively declined to a low of $120 million in 1968, recovered the following year and rose sharply to $240 million in 1970.

The United States also benefited from the growing EEC demand for paper and paper products. In 1970, these sales amounted to $150 million, more than double their value five years earlier. Climbing to even higher levels were deliveries of paper pulp and waste.

The rise in industrial production in the Common Market also boosted demand for nonferrous metals, in refined form as well as scrap.

## CAP cuts farm sales

U.S. exports of agricultural products to the EEC increased by less than 6 percent during the 1965-70 period. After declining three consecutive years, shipments rebounded to $1.6 billion in 1970, the same level as in the record year of 1966. Aside from crop conditions, the most significant force in shaping EEC demand for U.S. farm products in recent years has been the Common Agricultural Policy.

Designed to boost production and to stabilize farm income, the CAP introduced a system of price supports and variable levies on imported agricultural products which has protected EEC farm output from foreign competition.

U.S. sales of commodities subject to these levies fell by $172 million during 1965-70 while exports of agricultural products not covered rose by $255 million. Sales of the former, mainy feed grains, amounted to $454 million in 1970, up sharply from 1969, but still significantly below their 1966 record level. Products subject to variable levies accounted for 29 percent of total U.S. exports of farm products to the EEC in 1970, compared with 38 percent in 1965 prior to the application of the CAP system for basic commodities.

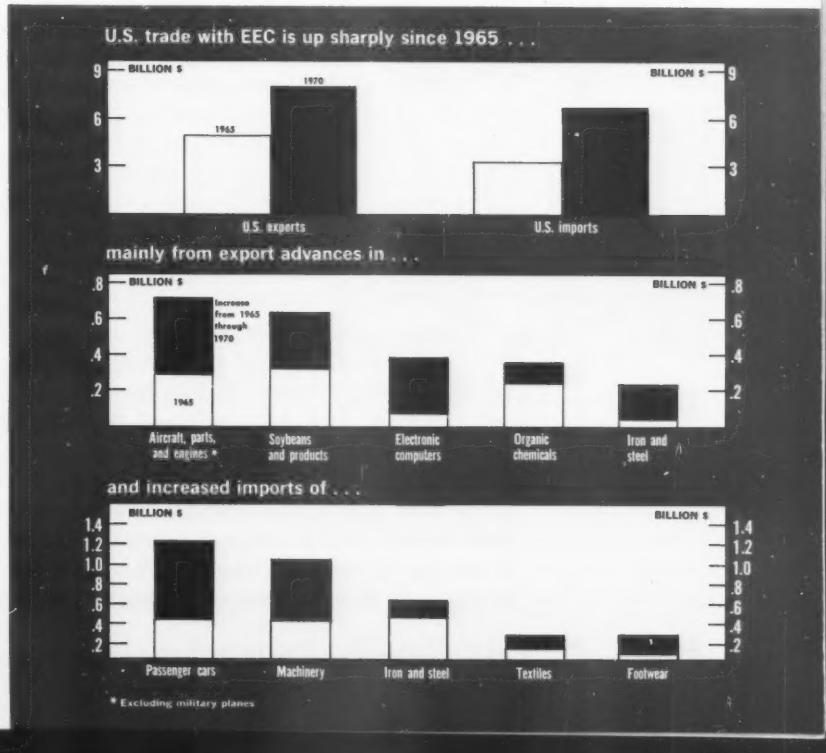
As poor crops in 1970 spurred EEC demand for imported feed grains, U.S. corn exports rose to $289 million but remained below 1965 levels. Sales of wheat grew only marginally after declining for three successive years. Meanwhile, shipments of farm products not affected by CAP levies rose to $1.1 billion, mainly due to rapid growth in exports of soybeans, meal, and cake. Although the EEC remained the largest foreign outlet for U.S. tobacco, sales in 1970 fell, thus limiting the gain since 1965 to one-fourth. Among other agricultural commodities, cotton suffered sharp cutbacks.

## Imports from EEC double

U.S. imports from EEC countries climbed almost without interruption to $6.6 billion in 1970, double their 1965 level. They thus rose faster over the period than did this country's overall purchases from abroad and also more rapidly than U.S. exports to the Common Market. The inflow of goods grew through 1968, stimulated in part by strike-related purchases of metals. Thereafter, imports receded from this high level but again turned upward strongly in 1970 and 1971.

The rise in U.S. imports from the Community centered primarily on passenger cars, machinery, footwear, iron and steel-mill products, and textiles, which together accounted for 56 percent of total U.S. purchases of EEC products in 1970 and for nearly two thirds of the expansion since 1965.

By 1970, U.S. imports of autos manufactured in the Common Market countries



## U.S. Trade With EEC

| Year | U.S. exports | U.S. imports |
|---|---|---|
| | Millions of dollars | |
| 1965 | 5,256 | 3,322 |
| 1966 | 5,529 | 4,125 |
| 1967 | 5,667 | 4,454 |
| 1968 | 6,127 | 5,885 |
| 1969 | 7,005 | 5,798 |
| 1970 | 8,423 | 6,609 |
| | Percent Change | |
| 1965-70 | +60 | +99 |

Note: In the first nine months of 1971, U.S. exports to the EEC were running at a seasonally adjusted annual rate of $8,757 million; imports, at a rate of $8,013 million.

Source: Bureau of the Census.

had surged to $1.3 billion to account for almost one fifth of total U.S. purchases from the EEC. Nearly tripling in value in five years, this import flow advanced irregularly over the period, with a particularly sharp rise in 1970 when the intake of cars produced in the EEC jumped by one fifth, contrary to the trend in domestic auto sales. The longer term increase is ascribable to attractive pricing and styling, improved marketing and servicing, and economy of operation.

Next to passenger cars, footwear loomed largest among U.S. consumer imports from EEC sources, although textiles followed closely. In 1970, purchases of footwear climbed to over $300 million, with Italy accounting for close to nine tenths of the total and virtually all of the increase. Meanwhile, demand for wearing apparel manufactured in the Community showed only limited growth. Men's and boys' sweaters and women's coats and dresses increased in popularity, while the demand for women's sweaters and other knitted outerwear, which had been by far the best sellers in the mid-sixties, abated considerably.

The EEC has supplied the U.S. not only with large quantities of consumer goods but also with many types of machinery, largely for industrial purposes. Rising by about 160 percent since 1965, the value of such purchases reached $1.1 billion in 1970.

The continued sharp uptrend in these imports, even during the recent period of sluggishness in the U.S. economy, stemmed from a variety of reasons. The EEC's cost-price advantages in various lines, a level of technology at times equal or superior to this country's, improved performance, and a service life comparable to that of U.S. products were all significant in widening the acceptance of industrial equipment manufactured in the Community. Liberal financing and shipments of lower cost parts to U.S. parent companies also aided the import rise.

Among the fastest growing items was textile machinery. Most of the $150 million in purchases from the EEC in 1970 came from Germany and much of the rest from France.

Manufacturers of office machines and parts also did well in this market as U.S. imports from the EEC more than doubled to $164 million. Germany was by far the major source among the Six, providing typewriters and calculating and adding machines. Italy was also an important factor in the market, mostly for non-electronic calculating and adding machines. Entries of office machine parts manufactured by U.S. subsidiaries in Germany and France also increased notably.

U.S. imports of EEC-made metalworking machinery peaked in 1968 but then turned downward. The fall-off reflected the inability of Italian companies to maintain production schedules due to recurring labor unrest.

### Iron and steel purchases climb

There has been a marked increase in U.S. imports of industrial materials from EEC countries. Iron and steel-mill products, foremost among these materials, were highly competitive as a result of heavy EEC investments in oxygen converters and electric furnaces and the integration of production facilities. Purchases peaked at close to $700 million in 1968, when the threat of a strike in this country led to heavy stockpiling of foreign steel.

Imports of chemicals from the EEC also trended upward but at an uneven rate. As in exports, organic chemicals dominated this trade. Germany, the world's top exporter of chemicals, was by far the leading EEC source.

The inflow of textiles more than doubled from EEC sources since 1965 to reach $300 million. The greater part of the growth came in 1970, due to heavy demand for manmade fiber yarn for knit and double knit fabrics.

Largest among the remaining U.S. imports from the EEC were alcoholic beverages (mainly wines and liqueurs) which almost doubled over the period to $166 million.

*—Bureau of International Commerce*

# DOMESTIC BUSINESS REPORT

- Improved advertising for the consumer
- New MESBIC organization begins action
- Federal-State Program a one-year success
- U.S. population on way to 322 million?
- Nationwide response to White House Conference

## Council Taking Steps To Improve Advertising

With a request to more than 1,200 corporate chief executives to review their company's policies on advertising and promotion, the National Business Council for Consumer Affairs took its first step toward improving future communications in the marketplace.

### Opportunity knocking

William D. Lee, executive director of the Council, expressed the opinion that such a review provides an opportunity for top management to assure that all such policies and procedures, their scope and implementation, have kept pace with the evolution of consumer expectations and modern advertising practices.

The Council and Secretary Stans sent letters to the corporation heads asking for an executive level review. Robert J. Keith, chairman of The Pillsbury Co., and Archibald McG. Foster, chairman of Ted Bates and Co., signed the Council's letter. Keith and Foster are chairman and vice chairman, respectively, of the Council's advertising and promotion subcouncil.

"Concern today in advertising has gone well beyond the bare truth of competitive claims," the Council's letter stated, "it has come to encompass questions of taste, of the relative roles of persuasion and information, of rational and emotional appeals, and of the impact of advertising on special types of audiences."

The Council stressed that the success of this review will "depend on individual decision, individual motivation and individual action."

"Advertising and promotion," the letter stated, includes virtually any communication to a consumer and the work of the subcouncil seeks to help make advertising and promotion more credible . . . and in addition, much more creditable.

**William D. Lee**
*Deputy Assistant Secretary and Executive Director National Business Council for Consumer Affairs*

"Consumerism," the Council defined in the letter, as "the growing

framework of expectations with which the consumers view the business establishment."

With this definition in mind, the Council continued, "we believe we will be able to continue to recognize an essential facet of the reality of consumerism: that it is alive, growing, and constantly changing; that it is not a static set of problems seen today and readily solved tomorrow. . . .

## Reflecting changes

"Rather, it reflects changes in values, attitudes, ethics and taste as they occur in our society."

The request, the Council stated, "involves an individual effort to seek maximum specificity in your own policies and procedures relating to every facet of marketing as it affects the consumer."

The Council said in addition, the request involves recognition of the importance of reducing such a policy statement and specific procedures to writing, the importance of top management involvement in the development of these statements, and the equal importance of disseminating them to every person in the organization involved in advertising and promotion.

"For many, it means a review of existing written policies, rather than the development of new ones," the Council continued further in the letter, "For all, it represents an opportunity to make certain that all such policies and procedures, and the extent to which they reflect management involvement and win employee commitment, have in fact kept pace with the evolution of consumer expectations and modern advertising practices."

**Robert J. Keith**
*Chairman and Chief Executive Officer*
*The Pillsbury Company*

**Archibald McG. Foster**
*President and Chief Executive Officer*
*Ted Bates & Company, Inc.*

## Voluntary action

The letter requested the corporate executives to indicate the extent to which they felt the voluntary action can help in strengthening the credibility and creditability of the advertising and promotion functions. They were further requested to indicate the degree to which they feel the role of the chief executive officer can contribute to such an effort and the availability of any examples of actions they have taken.

In advising the President and government agencies, through the Secretary of Commerce, a key function of the Council is to encourage voluntary action by the business community in consumer affairs. (See story on page 4.)

Secretary Stans' letter requested each corporate leader to "take part actively with the Council in its proposal for individual voluntary action . . . to provide tangible benefits to the consumer and the business community."

Noting the interest expressed by all elements of society in the impact of advertising and promotion, the Council said "concern is voiced virtually on a daily basis by private individuals, by people in government and by members of the business community."

## High-level review

The executive level review, the letter stated, is proposed to help assure the highest level of practices benefitting both consumers and business.

It could contribute significantly to fostering "a marketplace which is fair both to those who sell and those who buy," the Council concluded.

The letter further urged businessmen with any "strong feelings about specific advertising and promotion practices in your industry which you feel might be appropriate for discussion" by the subcouncil on advertising and promotion to express their thoughts to the Council.

Correspondence should be addressed to the National Business Council for Consumer Affairs, U.S. Department of Commerce, Room 4814-A, Washington, D.C. 20230.

On August 5, 1971, the President created the National Business Council for Consumer Affairs to "advise the President, the Office of Consumer Affairs, the Federal Trade Commission, the Department of Justice, and other Government agencies as appropriate. . ." through the Secretary of Commerce. Since its organization on August 5, 1971, the Council and its several Sub-Councils have reflected in their work the interest expressed by the President in encouraging voluntary activity by business leaders to help foster "a marketplace which is fair both to those who sell and those who buy.

# New Organization Being Set Up To Assist Minority Enterprise

Stronger support in financing and technical and management assistance for minority enterprise in the Nation can be expected as the result of a new organization founded this month at a convention held in Dallas, Tex.

## MESBIC Composition

The organization is called the American Association of Minority Enterprise Small Business Investment Companies and is composed of the MESBICs now licensed throughout the United States.

The founding convention was held Dec. 2-3 to ratify the new association's constitution, develop bylaws, appoint officers and discuss other matters relative to the goals and objectives of the association.

According to Walter W. Durham, president of UCC Venture Corp., a Dallas-based Minority Enterprise Small Business Investment Company, the new association "will make possible an exchange of data and information among MESBICs, on a regular basis, that heretofore has been difficult to obtain."

"In addition," he said, "we expect this new association will serve as an umbrella for a variety of related activities which will in turn provide us with the opportunity to be of greater service to minorities seeking our assistance.

The MESBIC program was developed by the Commerce Department's Office of Minority Business Enterprise, with the assistance of the Small Business Administration, in 1969. It is a national effort by the government to make venture, or "seed," capital more readily available to minorities seeking to finance business starts. The Federal government encourages major corporations, religious organizations, financial institutions, insurance companies, and others in the private sector, to sponsor MESBICs. A MESBIC can be capitalized at a minimum of $150,000, although several have capitalized or committed capitalization of $1 million. Forty-two MESBICs are now licensed by SBA.

OMBE Director, John L. Jenkins, who was one of the convention's keynote speakers said that "thus far MESBICs have financed more than 270 businesses which employ over 2,200 persons and which have an estimated annual payroll of more than $11 million and an estimated annual sales in excess of $45 million."

Jenkins emphasized that the forming of the new association is another step forward in the development of MESBICs and that the new organization would be of significant benefit not only to its membership, but to the entire MESBIC program.

Anthony G. Chase, Deputy Administrator of SBA, keynoted the second day of the convention. UCC Venture Corp., co-hosted the two-day meeting. UCC Venture Corp. is a MESBIC sponsored by the University Computing Corp., Dallas. Sam Wyly, its board chairman, also serves as Chairman of the President's Advisory Council for Minority Enterprise. Durham, the president of UCC Venture, is also director of DAME, an affiliate office of OMBE.

## President's request

In a message to Congress last month, President Nixon urged support of a $100 million budget increase for OMBE over the next 18 months—90 percent of which would go for support of local minority business development organizations, such as DAME, and other local level minority enterprise activity of technical and management assistance for minority business firms. OMBE expect to eventually establish affiliate offices in 100 cities throughout the United States. The remaining 10 percent of the proposed budget would be used at the national level to strengthen minority business and trade organizations, to generate broad private programs of marketing and financial assistance, to develop training programs, and to foster other national efforts.

The MESBIC program itself, guided by OMBE, is giving the private sector the opportunity to directly and materially assist in the strengthening local economy.

*—Office of Minority Business Enterprise*

**FOOD FOR PROFITS**—*Garland Foods, Inc., a meat packing operation begun with MESBIC funds in Dallas, Tex., is proud of its ham products. Garland officials, M. Montgomery and E. Williams, point out MOHAWK brand smoked hams to W. H. Thompson (left) of DAME, an affiliate office to OMBE. The new MESBIC organization will make exchange of information on enterprises such as this possible.*

STATE PANELISTS—*Delegates from the Four Corners and Ozarks states are shown at the federal-state conference on regional commissions. The state government participants formed one of several panels at this first national meeting in Virginia.*

# Federal-State Regional Program Proving A Successful Experiment

"One of the most successful experiments" in the area of Federal-state cooperative ventures is the regional economic development program, Robert E. Ruddy, special assistant to the Secretary of Commerce for Economic Coordination, told representatives of governors 20 states recently.

## First exchange

Ruddy gave the keynote address at a Federal-state conference on the Regional Commission Program in Arlington, Va. Representatives of each state comprising the five regional economic development commissions, and Federal cochairmen of the commissions participated in the first national exchange of ideas between these partners in the program. The program was organized under the Public Works and Economic Development Act of 1965.

Noting that each commission's comprehensive regional development plan is either completed or in its final stages of completion, Ruddy said, "Regionalism is likely to be a motivating idea in this country for some time to come." He challenged the group to answer the question "How to make it work better?"

Job creation and the increasing of income to levels approaching national norms are the commissions' major goals, Ruddy said, adding that responsibilities had been expanded to include providing the vehicle for solving major problems of economic dislocation or lag on a multistate, regional basis.

## Facilitating cooperation

"Politically, the commissions exist to play a major role in facilitating interstate cooperation and promoting the effectiveness of Federal-state planning and delivery mechanisms," Ruddy concluded.

Commerce Department staff members and Congressional staff members participated in the "cross fertilization" of ideas. Under Secretary of Commerce James T. Lynn, a member of the Cost of Living Council, discussed Phase II of the President's New Economic Policy.

The conference reviewed accomplishments and techniques in comprehensive planning.

The states' view of problems and accomplishments of the Regional Commissions Program was presented by a panel made up of state representatives from each of the five commissions. Panelists were Hawley Atkinson (Ariz.) Four Corners, Michael Kane (Maine) New England, Tom Kelm (Minn.) Upper Great Lakes, Leigh Hammond (N.C.) Coastal Plains, and Thomas McRae (Ark.) Ozarks.

Governors in the Coastal Plains Region reported that the mechanism of the regional commission encourages the setting of priorities in the Governor's Office. The Coastal Plains comprehensive plan gives the governors a rationale for approving or rejecting specific projects.

## A catalyst program

In addition, the Coastal Plains states' delegates concluded, the regional program serves as a catalyst introducing new money from state treasuries into programs approved by governors and state legislatures.

The New England Regional Commission's program won the endorsement and "highest level of support" from every state house in the region.

Representatives of the Upper Great Lakes Commission expressed a developing sense of regional identity.

Ozarks governors, urging that greater resources be available for the program, gave wholehearted support to the Ozarks Regional Commission and the concept of regionalism. Their representatives called resources "a vital question."

Four Corners Regional Commission, its states reported, has been

more responsive to the region's needs than certain other economic development programs with their more limited approaches.

Federal cochairmen, who formed one panel in the two days of discussions, were Stanley Womer of Four Corners, Chester M. Wiggin Jr., of New England, E. L. Stewart Jr. of Ozarks, Thomas F. Schweigert of Upper Great Lakes, and G. Fred Steele Jr. of Coastal Plains, moderator.

## Innovative methods

One suggestion from the Federal cochairmen was that commissions look for innovative methods of doing business. They noted the New England Regional Commission has created an Office of State Services to act as liaison for governors and legislative leaders with the Federal agencies in Washington. The Upper Great Lakes Regional Commission has established an environmental impact council composed of a representative from each state within the region, and a staff member from the office of the Federal cochairman. The Council reviews all projects with respect to their impact on environment and reports its findings to the governors.

## Results of conference

Some of the overriding issues to come out as a result of the conference were:

- Strong backing was given for the Federal-state partnership from the states, along with a stated desire to the continuation and expansion of the regional economic development program.
- Levels of funding must be substantially increased if the states are to continue their interest and support.
- Governors need to become personally involved and to increase their understanding and support of the program.

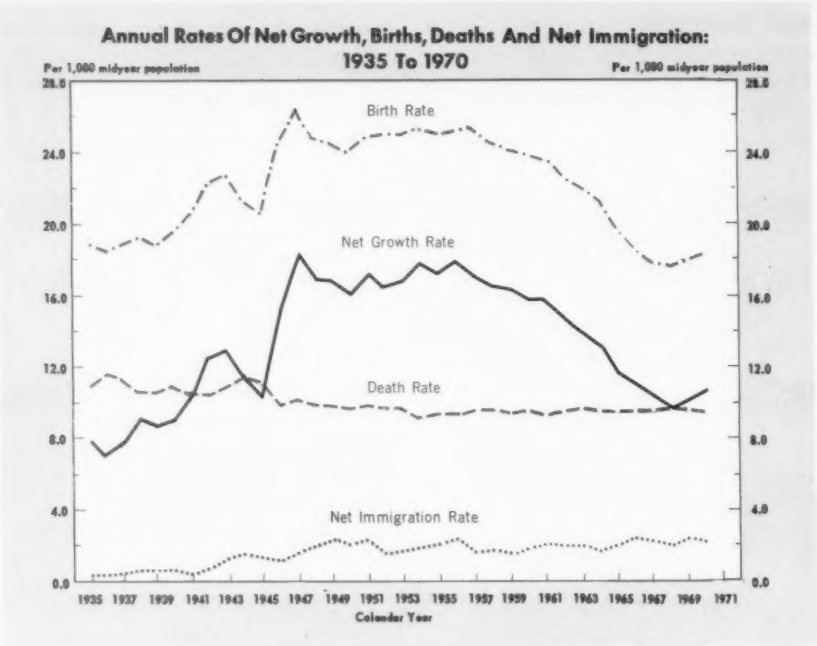
The commuications established at the Federal-state conference were found to be useful and important. State representatives and alternates expressed an interest in future conferences of this type.

The conference also included panel discussions on the budget process; the role of comprehensive planning in economic development; Congress and the economic development program.

*—Regional Commission Program*

**SHARING IDEAS**—*Robert Ruddy (left), special assistant for Regional Economic Coordination, talks with Kirby J. Winters (center), director of Intergovernmental Relations, Georgia Bureau of State Planning and Community Affairs, and J. McDonald Wray, States Regional representative, Coastal Plains Regional Commission.*

**THE FEDERAL ANGLE**—*Federal cochairmen shown discussing development plans at the Federal-state conference are from (left) Thomas F. Schweigert, Upper Great Lakes; Stanley Womer, Four Corners, and Chester Wiggin, New England.*




# U.S. Population On Way To 322 Million By Year 2000?

The U.S. population in the year 2000 is now expected to range between 271 and 322 million, slightly higher than the 266 to 321 million range projected in August, 1970.

## Wide variations

This is the latest projection made by Commerce's Census Bureau. The Census Bureau explained that the wide variation in the anticipated population level is due to different assumptions as to the future course of fertility in women.

The Bureau makes four assumptions as to the population level in the year 2000, depending on the number of children every 1,000 women will have during their childbearing years.

The assumptions as to the number of children born to every 1,000 women, and the resulting population, follow: 2,110 children, 271 million; 2,450 children, 288 million; 2,780 children, 305 million; 3,100 children, 322 million.

Thus a variation of one child born to every woman would result in a population difference, according to the Bureau's calculations, of 50 million persons by the end of the century.

The Bureau explained that the new assumptions are based on the belief that in the future the average age of the mother will be 25.8 years, younger than previous calculations. This change was made, the Bureau said, because it appears that in the future women may choose to have small families without substantial delays in marriage and childbearing. This belief, the Bureau added, is influenced in part by changing social attitudes toward contraception, abortion, and the role of woman in general.

All of the Bureau calculations are based on an assumed net immigration of 400,000 annually, and a slight improvement in the mortality rates. The Bureau explained that its assumptions are consistent with 1970 census data on age and sex.

The Bureau noted that different assumptions as to fertility would result in variations as to the age composition of the population. For example, if 2,110 children are born to every 1,000 women, 23 percent of the population will be under 15 years of age in the year 2000; if 3,100 children are born, 30 percent of the population will be under 15.

## Past assumption

In the past, the Bureau recalled, an older average of mother at childbirth was associated with a major economic or social disruption, and the result was a fairly low fertility rate. For instance, women born between 1910 and 1920 encountered the depression and World War II during their prime childbearing years. This group of women had an average age of mother of 27.8 years and a moderately low fertility rate. Correspondingly, a younger average age of mother in the past has been associated with a fairly high fertility rate.

The younger average age of the mother used in the new calculations, the Bureau explained, is believed to be more realistic for women currently in the young childbearing ages and those who have not started childbearing.

Using the revised assumptions, the Bureau projects the population range as follows during the remainder of the present century: 1975, 216 to 218 million; 1980, 228 to 237 million; 1985, 240 to 258 million; 1990, 251 to 279 million; 1995, 261 to 299 million.

A study on fertility indicators made by the Bureau resulted in the following conclusions:

Among married women who have nearly completed childbearing, that is, women 35 to 44 years old, Negroes have a higher fertility than whites. Although a larger percentage of Negro women are childless, a much larger percentage have had five or more children.

Fertility is higher among women living on farms than among women living elsewhere, and is lower in metropolitan areas than in nonmetropolitan areas. Fertility is no longer higher in the South than in the rest of the Nation.

Wives of white-collar workers have a lower fertility than wives of blue-collar workers. Women with only an elementary school education on the average have about one child more than women with a college education. The fertility level among white and Negro women who have completed high school is about the same.

The interval between first marriage and first birth is longer among women with some college education than among women who did not complete high school.

During the 1960s, the number of illegitimate births increased steadily. However, the increase was due more to the rapid increase in the number of unmarried women in the childbearing ages than to the increase in the rate of illegitimacy among these women.

The illegitimacy rate among Negro and other races has declined in the last decade, but is still several times as high as in the white race. At present, more than one-fourth of all births of Negro and other races are illegitimate.

The proportion of white wives 18 to 39 years old who had used contraception increased between 1955 and 1965. In the latter year, the proportion of wives who had used contraception was slightly lower among wives of Negro and other races than among white wives.

Within 10 years after its introduction, the pill had become the leading method of contraception among white couples. Between 1955 and 1965, the percentage of white couples who had used other leading forms of contraception dropped from 74 to 45.

In 1965, the majority of wives under 55 approved of abortion when pregnancy seriously endangered a woman's health, but disapproved of abortion if the only reason was a couple didn't want more children. Generally, wives with some college education were more favorable toward abortion.

*—Bureau of the Census*

## Mothballed Ships May Cut Pollution Problem

Mothballed Liberty ships may come back into service to solve crucial water pollution problems in the Nation.

### Contract award

Lockheed Shipbuilding and Construction Co., of Seattle, Wash., has been awarded a $191,750 research contract by the Commerce Department's Maritime Administration to investigate the feasibility of converting Liberty ships into floating waste-treatment plants.

If the study proves this type of conversion to be both technically and economically feasible, MarAd will get together with the regulatory agencies involved to proceed with a follow-on effort to develop detailed engineering plans and contract specifications to convert these drydocked vessels into waste-treatment facilities in the United States.

According to Assistant Secretary of Commerce for Maritime Affairs, A. E. Gibson, these ships would be equipped to process oily wastes, sewage, or industrial wastes that would otherwise be dumped into the Nation's waterways.

### Water-land comparison

Under the contract, Lockheed will compare both the cost and the productivity of a waterborne plant with a similar land-based facility.

Gibson noted that modular variations may permit the use of the same basic conversion plan for plants to process different types of effluent, thus significantly lowering the cost of individual units.

*—Maritime Administration*

**PAYING TRIBUTE**—*More than 100 persons gathered at a testimonial luncheon at the International Club in Washington, D.C., last month to pay tribuate to James M. Roche, chairman of the board of directors and chief executive officer of General Motors Corp., in recognition of his personal efforts in behalf of minority business enterprise, and other activities assisting members of minority groups. Roche has announced his retirement from General Motors effective at the end of this year. Under Secretary of Commerce, James T. Lynn (center) and John L. Jenkins, Director of the Office of Minority Business Enterprise (left), presented Roche (right) with the Commerce Department's and OMBE's first Award for Superior Public Service, noting that Roche has always been among the first to respond to Federal minority enterprise programs enlisting the support of the private sector.*

# White House Conference Invitations Receiving Nationwide Acceptance

The response of the Nation's key leaders to their invitations to a White House Conference designed to explore the business world as it may be 20 years from now is greater than even expected, according to the conference executive director, Robert W. Miller.

"Acceptances are literally piling in," said Miller.

## Business in 1990

The conference, *The White House Conference On The Industrial World Ahead: A Look At Business In 1990*, is scheduled for Feb. 7-9 in the Sheraton-Park Hotel, Washington, D.C. The three-day meeting will bring together some 1500 decision-makers of the U.S. from business, labor, academia, and government to examine the issues that need to be solved in order to prepare for a better business climate in 1990.

It is the first White House Conference to focus on business, and the first to be concerned just with future issues. President Nixon called for the conference to discuss the character of the American business system two decades ahead declaring "we must become the managers of change" because the private enterprise system is facing new challenges every day on every front. Mr. Nixon will address the conference attendees at a banquet Feb. 7.

Secretary Stans is co-chairing the event with Secretary of Labor James D. Hodgson. The Labor Secretary will be one of the major speakers at the opening session; the Commerce Secretary, at the adjournment session.

**WORKING SESSION:** *Members of the White House Conference staff and the Advisory Council for the event get together for a working session to decide on some of the issues to be discussed. Involved in this session are (from left) George Crawford, staff assistant to the President and a White House liaison for the conference; Arch N. Booth, executive vice-president, U.S. Chamber of Commerce; and George Pantos, Special Counsel to the President's Council for International Economic Policy. In the foreground is Robert W. Miller, executive director of the conference.*

Stans said at a conference held to alert the press to the highlights of the coming event that "we hope out of the pattern of discussion will come some warnings, some indications of opportunities, and some ways of addressing the attention of the public to the kind of pitfalls and opportunities that are unfolding ahead."

## Future-minded thinking

At the same gathering, Hodgson agreed with the Secretary of Commerce, and added that it would be well "if we could get more future-mindedness into the thinking of those who are leaders of our economic structure—business people, labor people, financial people, the people who prepare our young people in educational institutions for careers in business."

The Labor Secretary added that with this kind of future-mindedness a better job of anticipating some of the things that might happen could be possible. "If we can get people thinking in these terms," he said, "they can do a better job of planning for their own organizations with better understandings of the interrelatedness of institutions with regard to problems."

Miller said that today's businesses do a good job of planning for three to five years into the future, and some even plan ahead as far as ten years. Very few, he commented, look ahead as far as 20 years, and this can be important in helping to shape the roles business should now be planning to play.

The conference is based on four major themes: The Structure of the Private Enterprise System; The Human Side of Enterprise; The Social Responsibility of Business; and Technology and Resources for Business.

Each theme will serve as a target point to identify crucial business decision areas and possible future action. However, no formal recommendations will be made, nor will resolutions be passed, although

the conference proceedings will be published in 1972.

The conference format will begin with explorations of the future and of the four central themes at plenary sessions on the first day. Panel discussions—two on each topic—will divide the group into eight separate sessions the second morning, each led by prominent leaders in each field. The afternoon session of the second day plans 20 indepth workshops. On the final day of the conference time will be allowed for summaries, as well as a presentation on world trade.

Major speakers include Dr. William Harman, Director of Educational Policy Research Center, Stanford Research Institute; Dr. Walter Hoadley, Executive Vice President, Bank of America, San Francisco; Mr. Arjay Miller, Dean of the Graduate School of Business, Stanford University; Dr. Simon Ramo, Vice Chairman, TRW, Inc.; and Mr. Max Ways, Member, Board of Editors, *Fortune* Magazine.

Chairman of the Tuesday morning panel discussions have been announced as:

*Social Responsibility of Business:* Elisha Gray II, Chairman of the Board, Whirlpool Corporation, and William M. Batten, Chairman of the Board, J. C. Penney Company, Inc.

*Structure of the Private Enterprise System:* Dr. Weldon B. Bigson, Executive Vice President, Stanford Research Institute, and Dean Richard H. Holton, School of Business Administration, University of California, Berkley.

*Technology and Resources for Business:* Dr. Howard W. Johnson, Chairman of the Board, MIT, and Dr. Joseph L. Fisher, President, Resources for the Future, Inc.

*The Human Side of Enterprise:* Robben W. Fleming, President, University of Michigan, and Robert D. Helsby, Chairman, New York Public Employment Relations Board.

Miller announced that among the panel members will be: Jane Cahill, Secretary, Management Committee, IBM Corporation; Dr. Henry G. Manne, Visiting Professor, Stanford University Law School; Dr. Cleo W. Blackburn, President, Board of Fundamental Education; Paul N. Ylvisaker, Commissioner, Department of Community Affairs, New Jersey; Aaron S. Yohalem, Senior Vice President, CPC International, Inc.; Mrs. Hazel Henderson, Business Consultant, Writer; Alan Greenspan, President, Townsend-Greenspan Co., Inc.; and Mr. Ralph S. Saul, Vice-Chairman, First Boston Corporation.

## Other panelists

Other distinguished panelists will include: James P. McFarland, Chairman of the Board, General Mills, Inc.; Dr. Henry C. Wallich, Professor of Economics, Yale University; Nathaniel Owings, Founding Partner, Skidmore, Owings and Merrill; William J. Kuhfuss, President, American Farm Bureau Federation; Robert Charpie, President, Cabot Corporation; Dr. Athelstan Spilhaus, President, Aqua International, Inc., Dr. George Kozmetsky, Dean, College of Business Administration, University of Texas at Austin; and Dr. William O. Baker, Vice President for Research, Bell Telephone Laboratories.

Still other key executives who have agreed to serve as panelists are: Douglas Fraser, Vice President, United Auto Workers; Charles M. Brooks, Manager, Industrial Relations Division, Texaco, Inc.; Solomon Harge, Executive Director, Consumer Protection Association; Einar Mohn, Director, Western Conference of Teamsters; Berkeley G. Burrell, President, National Business League; and Douglas Souter, Vice President, American Smelting and Refining Co.

—*White House Conference On The Industrial World Ahead*

## Calendar For Businessmen

**Jan. 16-19—Miami Beach**—1972 National Exposition for Food Processors, sponsored by the Food Processing Machinery and Supplies Association. For information, sponsor's executive office, 7758 Wisconsin Ave., Washington, D.C., 20014 (301-656-5724).

**Jan. 21-23—New York**—78th annual convention of Northeastern Retail Lumbermen's Association. For information, the Association, 339 East Ave., Rochester, N.Y., 14604 (716-325-1626).

**Jan. 23-28—Tucson, Ariz.**—Basic Industrial Development Course, University of Arizona, accredited by the American Industrial Development Council. For information, John Swenson, coordinator of business conference, Room 112, B.P.A., University of Arizona, Tucson, 85721.

**Jan. 24-2—Philadelphia** — Plant Engineering and Maintenance Show, Philadelphia Convention Center. For information, Clapp and Poliak, Inc., 245 Park Ave., New York, N.Y., 10017.

## Ombudsman For Business

***Businessmen who need assistance in their dealings with the Federal Government now have a central office in Washington, D.C., to write or call for information, suggestions, or even for registering complaints—the Commerce Department Ombudsman for Business.***

***All inquiries should be addressed to the Ombudsman, Thomas E. Drumm, Jr., Special Assistant to the Secretary, U.S. Department of Commerce, Washington, D.C. 20230, or call 202-967-3178.***

# SCIENCE & TECHNOLOGY REPORT

- Winter storm watch in effect
- Agencies zero in on lead poisoning 'epidemic'
- Sea bottom explorations could affect ocean dumping
- Transfer of kilowatthour to power firms is probed
- Patents of special interest

## *Winter Storm Watch In Effect Across Nation*

As winter fastens its grip upon the Northern Hemisphere, the National Weather Service of Commerce's National Oceanic and Atmospheric Administration (NOAA) has in effect a watch and warning system to alert the public to the approach of winter storms.

The watch notifies people that a storm has formed and is approaching. People are advised to listen for the latest storm bulletins over radio and television, and to begin precautionary measures. The warning announces that a storm is imminent and that immediate action should be taken to protect life and property.

This operation is part of the general weather service. However, special provision is made to give advance notice of winter storms in order to reduce loss of lives, property damage, and the usual disruption of business and community life.

A special watch is maintained by several Federal agencies along the east coast. Ships, planes, satellites, and a "talking" buoy furnish weather forecasters with advance information on storms moving in from the Atlantic.

The buoy is an experimental device located about 100 miles east of the Virginia-North Carolina border that radios readings on air and ocean temperatures, and wind speed and direction. Such information will tell forecasters about the nature and movement of storms in that region.

### Volunteer spotters

In the sparsely-populated plains and mountains of the West, a network of several thousand volunteer spotters recruited by the Weather Service reports on developing blizzards. This system, now in its third year, was first set up in Wyoming, the Dakotas, and Nebraska. It has proved so successful that it has been expanded. Spotters are recruited for areas where weather stations are more than 50 miles apart.

In addition to the watch and warning system, the Weather Service conducts an extensive educational program about the winter storms so that people can prepare for them, and can know what to do and what not to do, when they strike.

Descriptive terms have been prepared to identify the various conditions associated with winter storms. For example, heavy snow usually means that four inches or more are expected in a 12-hour period, or six inches or more in 24 hours. But a heavy snow warning may mean that six inches or more are expected in a region where four-inch snowfalls are common, and only two or three inches where snow is infrequent. A blizzard

**PREPARING THE POPULACE**—*National Weather Service has a watch and warning system in effect at the present time to alert people to the approach of winter storms. It is a vast system making use of sophisticated instruments and volunteer spotters. This, plus an educational program, has sharply curtailed deaths from such storms.*

means winds of at least 35 miles an hour with considerable falling or blowing snow and a temperature of 20 degrees or lower for an extended period. An ice storm, freezing rain, or freezing drizzle warning means that a coating of ice is expected on the ground and other exposed surfaces.

### Learning to cope

Safety rules have been developed so that people can know better how to cope with winter storms, and avoid loss of life and the numerous hazards which they create. One rule is self-sufficiency or to plan for eventualities. Other warnings include the following: watch for fire hazards; remember that, if you are not in the pink of condition, snow shoveling can bring on heart failure; bear in mind that mittens are warmer than fingered gloves. Farmers threatened with blizzards are admonished to move livestock, especially young animals, to sheltered areas, and to provide extra water, since many winter-killed cattle die from dehydration.

Weather Service spokesmen say that an average of about 80 people die from winter storms each year. About a third die in storm-related accidents, primarily automobiles. A little less than a third succumb to heart attacks induced by overexertion in heavy snow. About one-tenth freeze to death, and the others die from various mishaps. But the number of deaths have been fewer in recent years, coincident with the warning and educational programs of the Weather Service. In 1960, 354 deaths were attributed to winter storms.

*—NOAA*

## Fish Catch Highest In Nine Years; Oil Production Up Too

Domestic catch of menhaden, a fish used mostly to produce an ingredient of poultry feed, during January-July this year was the highest in nine years, according to the National Marine Fisheries Service of Commerce's National Oceanic and Atmospheric Administration.

The latest **Industrial Fishery Products Situation and Outlook** published by the Service reveals that 1.3 billion pounds of menhaden were caught by the U.S. fishing fleet. From this, 163,600 tons of fish meal were produced. This production represents a 12 percent increase over last year.

Domestic production of fish oil was 39 percent higher than 1970.

## Nevada Gets Standard

Nevada is the 31st state to receive a new set of weights and measures standards under a program to replace the standards of all 50 states. The sets include standards of both the customary and metric measurement systems.

Thomas M. Stabler, Chief of the Office of Weights and Measures at Commerce's National Bureau of Standards, presented a set to State Senator Stanley Drakulich in a ceremony at the Nevada Weights and Measures Laboratory, Sparks, Nev.

### Updating competence

Many of the standards and instruments used by the states in weights and measures administration were provided by the Federal Government 100 years ago or more. The National Bureau of Standards is supervising replacement of the state standards to update and extend measurement competence throughout the nation, as required by scientific and technological advances.

Each new set includes standards of mass (weight), length, and volume and necessary laboratory instruments, including high-precision balances, all specially designed to meet state weights and measures requirements. Each set costs the Federal Government about $80,000, including calibration, installation, and training of laboratory personnel.

The actual regulation of weighing and measuring equipment in commerce is retained largely by the states. The Bureau of Standards is the principal technical resource for the states in this area.

*—National Bureau of Standards*

# Agencies Zero In On Cities' Lead Poisoning 'Epidemic'

Experts estimate that about 400,000 children in this country are victims of lead intoxication or poisoning because of eating paint chips from old walls or gnawing on window sills or door frames. Most live in the inner cities.

The paints, putties, plasters, and other building materials involved were produced before the 1940s when lead-based paints and related materials were supposed to be the best and most durable that money could buy.

Children are the principal but not the only victims of lead poisoning. Their elders throughout history have had more than a passing acquaintance with its ravages. The ancient Greek poet-physician Nicander discussed lead poisoning symptoms and remedies in his work, *Alexipharmaca.* Benjamin Franklin mentioned in his correspondence a "dry bellyache" and accompanying paralysis that afflicted numbers of citizens after drinking water or rum which had been in contact with lead roofs or coil condensers.

## Mental retardation

Though their circumstances are radically different, many of today's youngsters who live in dilapidated but formerly "good" housing are caught in a similar predicament. Significant amounts of lead are getting into their bodies, causing them to sicken and die. Short of death, one of the worst consequences is mental retardation. But lead poisoning's early symptoms—headache, irritability, insomnia, followed by vomiting, anemia, and worse—are too much like other less serious complaints to command proper attention from harried, overburdened parents or even professional health workers.

The present-day lead poisoning problem appears to be rooted in social conditions, but technical know-how may offer a faster solution than urban renewal and long-term economic programs. To develop this know-how, the Federal Government is underwriting a research program whose thrust is on the question: How do you keep the crawling infant and the toddler from finding and eating the sweet-tasting lead-based paints and building materials?

The Department of Housing and Urban Development (HUD) is addressing this question with the technical assistance of Commerce's National Bureau of Standards. At the same time, the Department of Health, Education, and Welfare (HEW) is administering a grant program to aid local governments in a medical program for detecting and treating victims and educating potential victims, looking also toward detection and removal of lead from the dwelling.

**BURNING IT AWAY**—*Is burning an acceptable method for removing lead contaminants from housing surfaces? The National Bureau of Standards is studying this and many other possible techniques for removing the lead-poisoning threat to inner-city children. Technical findings and cost-effectiveness evaluations will be utilized as a basis for recommending programs to solve the problem.*

To help carry out the intent of the Lead-Based Paint Poisoning Prevention Act, the Bureau of Standards, under contract with HUD, is mounting a program that calls for:

- identification of "lead belt" areas posing the greatest risk or potential risk to children; estimating on a national basis the number of houses and children who are in peril;
- evaluation of methods and devices for detection of lead in building materials that children could gnaw on or eat;
- development of performance criteria for evaluating various methods of eliminating the lead poisoning hazard; evaluation of currently available methods.

## High-risk areas

In pursuing these objectives, the task of identifying high-risk areas falls to a Standards group specializing in social sciences, systems analysis, and statistics rather than physical sciences, engineering, and weights and measures—which casual observers often take to be the Bureau's only concerns. These specialists in social phenomena, staffing the NBS Technical Analysis Division, are synthesizing a mathematical model of high-risk areas based on Census data such as age of dwellings (an indicator of the likelihood that they were once painted with lead-based paints), the number of young children, etc. On this basis the population at risk and the potential extent of the problem nationally will be determined. From information available directly or accessible in HEW or local program files, the model will be derived and validated for selected urban areas.

Elsewhere in the NBS laboratory complex near Gaithersburg, Md., chemists of the Analytical Chemistry Division are working on other aspects of the lead poisoning problem. They are concerned with providing rapid, accurate, portable, easily operated, safe and reliable devices for detecting the presence of lead in a building and measuring its concentrations. Whether present in paint, plaster, putty or other materials, the poisonous lead must be searched out and either removed or securely covered or blocked from access by children.

How this may be done most practically and economically will be carefully explored. To calibrate measuring instruments, NBS Standard Reference Materials containing known amounts of lead—and representing actual samples collected in the field—will be developed. Old building materials and those currently on the market that are likely to contain hazardous amounts of lead will be identified. Production data and building records will be examined to find the age distribution of housing with lead-based materials as related to the period when "non-hazardous" materials began to be marketed, considering also the rate at which they were introduced into common use.

**'ENVIRONMENTAL EPIDEMIC'**—*Old chairs, like old walls, too often are flaked with lead-based paint creating a danger to children. An "environmental epidemic" of lead poisoning among inner-city children has resulted in a Federal research effort for which the National Bureau of Standards is providing technical aid.*

Overall responsibility for the NBS program is centered in the Bureau's Building Research Division, which is also assigned the task of describing specific means for removal of lead after it is detected in housing. In the search for an effective remedy, the Division's building technologists, materials experts, engineers, and economists are pooling their talents, techniques, and knowledge.

## Many possible dangers

NBS experts are considering many possible sources of danger to children. Both interior and exterior paints, plaster that may have absorbed lead from paints, caulking, etc., are being looked into. Existing laws and industry standards have assumed that paint-eating children only chew on inside surfaces and flaking materials, but some observers are convinced that children have been poisoned from outside surfaces as well. Currently, exterior materials and coatings are not included under the voluntary industry standard that limits lead content to no more than 1 percent by weight of the material used. Although attention has been focused on keeping lead-based paints off cribs, toys, and the like, comprehensive practical protection of children is yet to be achieved.

Pencils used by school children (and government workers), for example, were recently checked by the chemist father of a pupil. He found them coated with paints "carrying as much as 23 percent lead," and the Pencil Makers' Association subsequently moved to establish a voluntary certification program assuring the safety of paints used on wooden pencils. Even pediatric hospitals have been found to be a source of danger: New York City lead poisoning control officials a few months ago found that 20 percent of the city's public and private hospitals had high lead paint levels, although the risk to hospitalized children was considered relatively slight "since they were under closer supervision than at home."

In helping the Federal Government to mount a comprehensive attack on this national problem, NBS expertise is being focused on

these three urgent questions:

- Where is the hazard actually turning up (recognizing that it sometimes appears in rather surprising places)?
- What monitoring instruments will most effectively detect and measure the presence of lead in housing materials?
- What kind of system or systems will best accomplish removal of the hazard, and what would be the relative costs?

Considered in detail, the basic questions give rise to many further questions bearing on the advantages and disadvantages of various proposed remedies. Is sanding of surfaces, for example, ruled out because of clouds of toxic dust that may result? Would burning be an acceptable method in spite of fumes? Would it be sufficient to re-do surfaces up to a height of four feet, on the assumption that paint-eating children could not reach higher? How effective would solvents be? What about materials that might be used as a replacement for toxic-painted walls or as a barrier between child and paint?

Government scientists and technicians, zeroing in on the technical difficulties, hope to clear away major obstacles that have been hampering the solution of an eradicable disease—childhood lead poisoning—that has taken on the dimensions of an "environmental epidemic."

*—National Bureau of Standards*

# Sea Bottom Explorations Off N.J. Coast Could Affect Ocean Dumping

Engineers facing the problem of waste disposal or undersea mineral exploration should be able to make better judgments as to the effects of their proposed operations as a result of work being done by a Government scientist working in a mini-sub along the New Jersey coast.

Dr. Donald Swift, of Commerce's National Oceanic and Atmospheric Administration, has found evidence seriously challenging the long-held theory that nothing significant has happened to the continental shelf since it was flooded after the ice age.

During a series of dives, Dr. Swift has found that storm currents move seafloor sediments about, causing slow but unmistakable changes on the continental shelf.

This project is one of the first science projects of NOAA's Manned Undersea Science and Technology (MUS&T) programs.

The changeable currents of the ocean over a period of time constitute the "climate" of the continental shelf, Dr. Swift believes. These currents act on the topography of the shelf in a manner analogous to the actions of the climate on the topography of land.

Currents during fair weather, Dr. Swift has concluded, have little or no effect on the topography of the continental shelf. During storms, however—particularly during the season of nor'easters, which push masses of water down the coast with great force and regularity—there are considerable changes on the shelf.

## Affects large areas

Dr. Swift's findings are directly relevant to the problem of large-scale offshore waste disposal. While heretofore it has been assumed that waste material dumped well away from land would tend to stay in the area where it is dumped, his findings indicate that it might be carried for many miles under water, potentially affecting large areas of the sea bottom.

He made one dive in the area of the New York city dump site with Dr. David Duane of the Army Corps of Engineers Coastal Engineering Research Center. Dr. Duane is conducting an ongoing study of the dump site. Twelve other dives were conducted by Dr. Swift, other NOAA personnel, and a graduate student assistant from Old Dominion University. Dives were made in the PC-8, a two-man, transparent-nosed submersible of Perry Oceanographics, Inc.

## Examining the swale

The study is part of a major scientific effort by NOAA's Atlantic Oceanographic and Meteorological Laboratories in Miami, and MUS&T to learn more about the relationships between deep currents that flow along the top of the continental shelf, and the topography of the shelf itself. In this submarine climate, Dr. Swift found, sand and other sediments are transported along and across the shelf, intermittently but with pronounced effect, much as sand is transported across a desert by desert winds.

Examining the ridge and swale (trough) topography of the continental shelf off New Jersey, Dr. Swift discovered that the ridges—which are up to 30 feet in height, with gently sloping sides—appear to be formed during storms, at least in some areas. Troughs are swept out during the storms, piling sand on top of the ridges. During fair weather, gentle wave surges push the fine sand down from the sandy ridge crests. This action explains the composition of the undulating surface, which he found to be made up of medium sand on the crests, fine sand on the slopes, and coarse sand in the intervening troughs or swales.

The substrate—older sediments, usually in the form of hard muddy sand—was frequently visible in the bottom of the troughs.

Dr. Swift and his associates visually examined the seafloor with the aid of powerful searchlights on the mini-sub. They also photographed the bottom and took current velocity measurements and seafloor grab samples. *—NOAA*

# Transfer Of Kilowatthour From Lab To Power Company Is Investigated

Edison Electric Institute is cooperating with Commerce's National Bureau of Standards in the investigation of the accuracy of transferring the kilowatthour from NBS to power companies.

An engineer from the New England Power Service Company, S. R. Houghton, has been appointed as a Research Associate by the Institute to conduct the two-year program. He will work at NBS, under the general direction of NBS engineers, and in the meter laboratories of selected power companies.

The kilowatthour is the basic unit on which a customer is charged and, thus, on which the revenue of a power company depends. Houghton will first determine how effectively this unit is transferred from NBS, where it is established, to these companies. He will then investigate ways to improve its transfer and maintenance, and its use in the calibration of the many watthour meters the company installs on customer premises.

## Testing a small sample

The research is needed in part because of the rapidly growing practice of accepting or rejecting large batches of watthour meters by testing only a small sample. This requires a very accurate standard meter, and an even more accurate reference meter. An extension of time between calibrations of meters in service likewise requires very stable standards in the meter laboratory. In addition, independent means of verifying the accuracy of house-type meters as they are installed are needed to insure fairness to both customer and the power company.

In this same program NBS is improving its master watthour meters and its methods of calibrating portable standard meters as well as developing new and more accurate standards and calibration methods. This cooperative study will enable power companies to take advantage of these developments with a minimum time lag.

In this pilot study, Houghton will establish the accuracy and stability of a group of portable standard watthour meters and take them to selected power companies. The companies will then calibrate the meters with their standards. Statistical procedures worked out in cooperation with NBS will be used to analyze the results. He will then investigate the possibility of using such interlaboratory or round-robin tests to establish the kilowatthour in meter laboratories and to maintain it by periodic shipments of meters of known characteristics and stability. Studies of new types of electronic watthour meters will also be carried out, as well as the feasibility of interlaboratory tests of highly stable house-type meters to evaluate the overall accuracy of meter laboratories.

*—National Bureau of Standards*

**POWER PROBER**—*S. R. Houghton, Research Associate from the New England Power Service Company, adjusts the power to a wattmeter calibration console. He is investigating means for improving the transfer of the kilowatthour from the Bureau of Standards to power companies, maintaining this accuracy at the power companies, and improving the calibration of consumer watthour meters.*

# Patents Of Special Interest

Recent patents issued by the U.S. Patent Office include:

**Freezing oil spills.** Cleaning up marine oil spills by freezing the surface layer of oil, preferably with particles of dry ice to enable the oil to be screened off the surface as a cake. Patent No. 3,614,873 issued to Edward L. Cole, Fishkill, N. Y., and Howard V. Hess, Glenham, N. Y., and assigned to Texaco Inc., New York, N. Y.

**Oil entrapment.** An oil slick entrapment and containment watercraft which has a pair of pontoons buoyantly supporting an open bottomed entrapment tower and a funnel-shaped surface-skimming shroud. The open bottom of the entrapment tower is below the water level and, as the craft moves on the water having an oil slick, the oil passes into a skimmer and into the entrapment tower where the column of liquid is raised by vacuum applied to the top of the entrapment tower. Oil rises to the top of the water in the entrapment tower due to the difference in specific gravity and without emulsifying and is then pumped off the top. A single pump carried by the craft is connected by suitable piping arrangements and provides multiple functions including drawing vacuum in the entrapment tower by aspirating air from the entrapment tower through an aspirator, supplying air to the pontoons, and pumping the oil from the entrapment tower. The buoyancy of the pontoons is controlled by supplying air and water to the top of the pontoons allowing the water to escape out of a slot in the bottom of the pontoons and providing air purge lines in the pontoons. Patent No. 3,615,017 issued to Joe M. Valdespino, 5023 Golf Club Parkway, Orlando, Fla. 32808.

**Method of constructing building units.** The space between the lateral party walls of a selected existing dwelling of a row-house complex is gutted and the entire space cleared; and a traverse wall defining the rear end of the new or rehabilitated unit is erected between the party walls up to the second story ceiling level. Floor panels are installed on temporary supports at the second floor level so as to extend inwardly from the rear wall; and two prefabricated modules are delivered to the site, one containing a kitchen and the other a completely equipped bathroom, and each extending to a height of one story. The former is conveyed between the party walls to a location adjacent the floor panel, and against one of the party walls approximately midway of its length, and the walls are placed on the floor panels. The floor panels are then tied to the rear wall and the rear side of the modules and the remainder of the unit, floors, walls, partitions, roofing, is then completed around the modules which serve as an inner core. Patent No. 3,616,592 issued to Irving Rothman, 16 Halcyon Court, Baltimore, Md.

**System for detecting glaucoma.** A light beam is directed at an eye being tested. The light is reflected to a detector. The eye is vibrated simultaneously by a vibrator placed adjacent to an eyelid. The response of the eye to the vibration as measured by the detector is calibrated to indicate pressure. Patent No. 3,613,666 issued to Milo Oldell Hobbs, Torrance, Calif., and assigned to North American Rockwell Corporation.

**Push button door lock.** A compact push button door lock is provided which can be installed in an ordinary door without enlarging the normal opening through which a conventional lock is installed and utilizing a standard latch. The lock includes a number of friction driven discs each of which has a control button. A large number of permutations are possible despite the small size of the lock making it almost impossible for someone who does not know the combination to open the lock. The discs are also provided with breakout members so that the home owner can provide his own combination. Patent No. 3,161,667 issued to Thomas K. McGourty, Aptos, Calif., and assigned to Time Research & Development Corporation.

Abstracts and drawings of patents are published as they are issued in the *Patent Official Gazette* each Tuesday. More than 1,600 patents are issued each week. Trademarks are published in the *Trademark Official Gazette*. Copies of the *Patent Official Gazette* and the *Trademark Official Gazette* may be obtained from the Superintendent of Documents, GPO, Washington, D.C. 20402.

# Science Calendar

**Jan. 9-14—Boulder, Colo.**—University of Colorado. Workshop on "The Management of Technology: Effective Management of Engineers and Scientists." Sponsored by the university's Center for Management and Technical Programs.

**March 1-3**—Washington, D.C.—Shoreham Hotel. 13th Scintillation and Semiconductor Counter Symposium. Sponsored by Nuclear Science Group of the Institute of Electrical and Electronics Engineers, Atomic Energy Commission, and the National Bureau of Standards.

**March 1—Gaithersburg, Md.**—National Bureau of Standards. IEEE Computer Society.

**March 22-24—Gaithersburg, Md.**—National Bureau of Standards. Conference on Accuracy in Spectrophotometric, and Phosphorometric Measurement.

**April 24-27—Washington, D.C.**—American Physical Society, Sheraton-Park Hotel.

December 13, 1971

# International Commerce

- Chemicals group sees Soviets, Romanians
- Washington's official trade briefs
- $45 million exhibition in Korea
- French growth is slowing
- Dutch acting against 'stagflation'
- Austrian expansion analyzed
- Finns hope to begin rebound

## At New York World Trade Center

# Newsmemo

Our man at the UN, is the label that the U.S. business community can pin on William W. Allen. He is the new adviser to the U.S. Mission to the UN on the trade and industrial development projects being worked up by the United Nations. His task is to help alert American firms to UN opportunities at an "early warning" stage. He has had comprehensive experience in the chemical industry, and most recently has been with Commerce Department's Office of International Business Assistance. He can be reached at 799 UN Plaza, New York, N.Y., 10017, telephone 212-573-6469.

Having a major impact on the U.S. world trade community is the Williams Commission Report. This was apparent in repeated references to it at the recent National Foreign Trade Council convention. The document, prepared by the President's Commission on International Trade and Investment Policy headed by former IBM executive Albert L. Williams, was released this fall. Entitled "United States International Economic Policy in an Interdependent World," it is available at $7 from the Superintendent of Documents, U.S. Govt. Printing Office, Washington, D.C., 20402. The 394-page report has 147 specific recommendations for action, and there are two volumes of background papers.

Another document that is making a mark in the same field is one by the National Foreign Trade Council itself. "The Impact of U.S. Foreign Direct Investment on U.S. Employment and Trade" includes over 40 case studies drawn from the experiences of U.S. companies. It is subtitled "An Assessment of Critical Claims and Legislative Proposals." The publishing National Foreign Trade Council, Inc. is at 10 Rockefeller Plaza, New York, N.Y., 10020.

Business travelers returning to the U.S. should know the current trademark restrictions that might apply to items they have purchased abroad. A new booklet, "U.S. Customs Trademark Information," published by the Bureau of Customs has the pertinent details. Trademark curbs exist, for example, on certain well-known cameras made in Germany and Japan, perfumes from France, and jewelry, musical instruments and watches. For a copy of the trademark booklet write Commissioner of Customs, P.O. Box 7118, Washington, D.C., 20044, or get one at the 43 Customs Offices in the U.S.

Romania has joined the General Agreement on Tariffs and Trade, and thus has become the 80th member of GATT. Romania has no customs tariff, but has declared to GATT its intention of increasing imports from GATT member nations at least at the pace it increases its total imports under published national economic plans. Czechoslovakia and Poland are Eastern European nations already in GATT.

## International Trade Winds

CONSTRUCTION — Romania's State Enterprise for Foreign Trade, ROMCHIM, has awarded to Badger Ltd., London, a contract for the design and engineering of an acrylonitrile plant to be built at the petrochemical complex at Pitesti. Badger Ltd., a subsidiary of the Badger Co., Inc. of Cambridge, Mass., will also participate in the construction and startup of the facility. The new plant, which will utilize the Sohio-patented one-step process, is scheduled to be on stream in 1973. Badger designed and engineered the first acrylonitrile plant to be built at Pitesti, which started operations in 1969, and has built numerous plants worldwide using Sohio acrylonitrile technology.

METAL PRODUCTS—Southwire Co., Carrollton, Ga., has announced the startup at Hitachi-shi, Japan of a Southwire Continuous Rod (SCR) system. Southwire provided equipment, know-how, technical assistance and training to Hitachi Wire Rod Co. Ltd., and granted Hitachi the use of various equipment and process patents which Southwire holds in the field of continuous casting and rolling. According to Southwire, the system is capable of producing copper redraw rod at a rate in excess of 30 short tons per hour.

CONSTRUCTION ENGINEERING—Wellman-Power Gas, Inc., Lakeland, Fla., is participating in the development of what will reportedly be one of the largest fertilizer manufacturing plants in the world, at Cochin, India. Fertilizers and Chemicals Travancore Ltd. (FACT) will build the facility as part of its program to expand production of agricultural chemicals. Wellman-Power Gas has been awarded the contract to provide the process engineering, know-how and documentation which will enable FACT to develop the detail engineering for the facility. Wellman-Power Gas will also furnish personnel to advise and assist with detail engineering, construction and startup. The Cochin plant will have the capacity to produce 485,000 metric tons per year of various granular products.

**IN SOVIET CAPITAL**—*Meeting with U.S. Embassy officials, mission members discussed business contacts in USSR. Seated (from left): Economic-Commercial Officer Lewis W. Bowden, Mission Director Jack O. Padrick, C. Thomas Cross, U.S. Ambassador Jacob D. Beam, Joseph M. Williams, Robert W. Straus; standing, Charles E. Hanley, William D. White, Richard G. McChrystal.*

# Chemical Mission Sees Sales In Soviet Union, Romania

Signs that the climate for increased trade between the United States and both the USSR and Romania is definitely warming are reported by Jack O. Padrick, Director of the Commerce Department's Office of Business Services. He based this conclusion on the findings of a recent trade mission he led to both countries for the U.S. chemical processing and chemical equipment industries.

While immediate sales were sought, the mission members were primarily interested in learning "how to do business in a communistic country" and "is there business to be had in the chemical industry area?" With the members listing anticipated sales of over $30 million within the next 12 months, as a result of their discussions in both the USSR and Romania, it is obvious that these questions have been answered.

The mission made its trip in November. The first announcement of Secretary Stans' high level trade talks with Soviet top officials was made while the mission was in the Soviet Union. According to Padrick, the excitement and good will generated by this news in the USSR aided his mission's success.

Romania also has been the focus of a number of recent visits by top U.S. governmental figures—commencing with President Nixon's official state visit in August of 1969, and including Secretary Stans' trip in April of 1971, as well as Transportation Secretary John A. Volpe's visit just the week before the mission's arrival in Bucharest.

***PHOTO ON PAGE 33—"A symbol of the opportunity that exists in the U.S. to develop commerce with other countries" was the description applied recently to the World Trade Center in New York by Secretary Stans. The Secretary is shown with (left) Assistant Secretary Harold B. Scott and (center) Austin J. Tobin, Executive Director of the Port of New York Authority that is constructing the Center. He toured one of the twin 110-story towers in the Center, which will bring together in one complex in lower Manhattan hundreds of firms and agencies engaged in world trade.***

Over the years, trade between the United States and the USSR has been far less than normal between what are the world's first and second ranking industrial powers.

In the chemical area, U.S. exports in 1970 to the USSR amounted to only $24,683,000; in turn, the United States imported less than $1 million worth of chemical products from the Soviet Union. This level of trade is far below the potential either way.

The mission, in reporting its findings, explained that basic to any successful trading with the Soviet Union is an understanding of how their system operates. This can be learned only from firsthand experience.

As a result of its Commerce Department connection, the group was hosted by the USSR Chamber of Commerce and officially recognized and received by the various Soviet ministries and trading organizations. In these group meetings, the mission members were able to query their hosts as to the extent of Soviet interest in the various chemical products and processes offered by the U.S. companies, as well as to arrange for individual follow-up meetings.

Mission member Richard McChrystal, of the Ralph M. Parsons Co., stated that the "mission made it possible to meet the key people in all of the key ministries important to our business area. I could not have done as well in many weeks alone—and perhaps under no other conditions."

In addition to meeting with the USSR Chamber of Commerce, group meetings were held with the Ministry of the Chemical Industry, the Ministry of Chemical and Petroleum Machine Building, the Ministry of the Petroleum Refining and Petrochemical Industry, the State Committee for Science and Tech-

nology, and various Soviet trading groups; such as, V/O Licensintorg and V/O Techmashimport.

No matter whom U.S. companies plan to deal with in the USSR, it is important for them to recognize that all trade and industry is part of the state, according to Padrick. "Thus," he said, "the current Five Year Plan should be analyzed to see what priority is given by the state to your particular area of interest."

## Focus on chemical industry

In the Ninth Five Year Plan, for the period 1971-75, continued and increased emphasis is given to the chemical and petrochemical industry, and new emphasis is given to consumer products. The mission was informed that the Ministry of the Chemical Industry hopes to invest more than 17 billion rubles (about $20 billion in U.S. dollars) during this period.

Most of this Soviet investment will be consumed within the country and not used for purchases abroad. However, the Soviet officials evidenced detailed interest in the products, technology, equipment and design capabilities of the various mission members.

Tom Cross, of Diamond Shamrock Chemical Co., stated that "there is substantial opportunity to sell certain of our products and certain advanced technologies in the USSR."

Cross added that the products which seem to have the most potential are in the fields of pesticides, herbicides, fungicides, animal health products and specialty chemicals.

According to Robert Straus, president of Galaxy Inc., the "potential for sales of patent licenses and 'know-how' is very substantial."

Somewhat ironically, the Soviets complained to the mission that Americans are not trying hard enough to sell to the USSR. They cite the fact that their main contact with American companies is through Japanese or Western European firms where such firms are U.S. licensees or subsidiaries.

Ralph Wise of the Lummus Co., whose firm has been doing business in the USSR through Japanese intermediaries, stressed the nonavailability of financing from the United States as a critical causative factor involved.

Currently Export-Import Bank financing is not available to the USSR. President Nixon, however, was recently granted authority from Congress to ask Eximbank to guarantee American bank credit to the Soviet Union.

Other trade impediments pointed to by the Soviets are lack of most-favored-nation treatment, and that many U.S. items still require an export control license before they can be exported to the USSR. In response the mission noted that the U.S. Commerce Department, administering the export control program, has recently taken important steps to remove items from its control list, and to be more liberal in licenses for many of the items still remaining.

A factor which will probably become more significant as U.S. exports to the Soviet Union increase is that the Soviets are already buying far more from the United States than they are selling. For example, this year the Soviet trade deficit with the United States will approach $80 million. With expected large shipments of machinery to the Kama River truck facility and major grain sales, this deficit could grow significantly next year.

***A list of specific items of interest, which have been authorized for foreign purchase, was given to the recent trade mission by Techmashimport, a USSR foreign trade organization. This unit handles imports of chemical industry equipment. Copies of the list, and of the* 1971-75 *Five-Year-Plan directives for the chemical and petrochemical industry, are available from the Office of Business Services, BDC-580, U.S. Department of Commerce, Washington, D.C. 20230.***

Customarily, the Soviets have preferred to keep their trade, even on a bilateral basis, in balance. Accordingly, American companies which will agree to buy from as well as sell to the USSR will be most favorably received.

The mission members developed a list of tips for U.S. firms on how to do business in the USSR:

- ► Show patience and perseverance.
- ► Line up appointments in advance, through the Soviet Embassy in Washington or Amtorg in New York.
- ► Approach the U.S. Embassy in Moscow for general assistance and guidance.
- ► Directly contact the USSR Chamber of Commerce; the State Committee on Science and Technology; and the Ministry of the Chemical Industry. All three have stressed their desire to assist American businessmen.
- ► Develop personal contact with the Soviets.
- ► Plan more than one trip—it will be required.
- ► Again, show patience and perseverance.

Once a contract has been agreed upon, Western businessmen laud the Soviets for scrupulous adherence to the agreement, including payments as promised. In addition, the American businessman will find that the Soviets are professionals, thoroughly knowledgeable in their respective fields.

Although there is a time factor involved, U.S. chemical firms interested in testing the Soviet market should consider participating in a Soviet Chemical Trade Show being planned for Moscow in 1974. Anyone interested should contact the USSR Chamber of Commerce, which is actively seeking American participation. The show will be a follow-up of the "Chemistry—70 Exhibition" held in September

CONFERENCE IN BUCHAREST—*Mission members met in Romania with officials of several Ministries, Chamber of Commerce, other trade groups. Above, discussion with leaders of foreign trading organizations of Ministry of the Chemical Industry.*

1970 in Moscow, in which various U.S. companies, such as Union Carbide and DuPont, participated.

## Romania

In Romania, as in the USSR, the trade mission was hosted by the State's Chamber of Commerce. The Chamber helped in arranging group meetings with the Ministry of Chemical Industry, Ministry of Foreign Trade, Ministry of the Machine Building Industry, and the various trading groups.

While Romania, because of its smaller size and population lacks the overall trade potential of the USSR, it was second to none in its welcome to the mission members. Alexander Albescu, Deputy Minister of the Chemical Industry, hosted the mission at a state dinner; the general director of Romchim turned over his personal office to the trade mission members for the better part of a day for meetings with his staff; and Gheorghe Deixner, general director of the Ministry of the Chemical Industry, extended extraordinary personal courtesies.

U.S.–Romanian trade was $79.8 million in 1970, with U.S. exports accounting for over $66 million of this amount. This imbalance in Romania's trade account with the United States is the single largest inhibiting factor in increased trade between the two countries. The "desire" is there—Romania simply lacks the means to buy all that it would like from the United States.

As stated by one of the mission members, "The name of the game is reciprocal trade. If we want to do business in Romania we must be willing to either buy something from them or give them a chance to earn the money to pay us."

In recognition of Romania's need for foreign capital, the Council of State passed in March of this year a law allowing up to 49 percent foreign ownership of equity in joint Romanian enterprises, with guaranteed hard currency repatriation of profits. Romania thereby hopes to keep its foreign debt, currently about $1 billion in Western bank credits, at manageable levels by substituting foreign equity for foreign debt.

Since, under its current Five Year Plan for the 1971-75 period, Romania plans to build 180 chemical plants, the potential for American involvement in design, advanced technological processes, equipment, and machinery is great either on a direct sale or participation basis. While in Romania, several of the mission's members were asked to submit such proposals.

At the Ministry of the Chemical Industry, Deputy Minister Albescu pointed out that over the last five years, Romania's investment in its chemical industry had been 20 percent of the country's total.

Last year, chemical products equaled 10 percent of the country's total domestic production. Under the 1971-75 Plan, Romania intends to continue its emphasis on the chemical industry. Production of plastics, synthetic resins, and synthetic rubber are all to be doubled during that five-year period. Output of fertilizer is also to be stressed, as is the consumer area. In general, the Chemical Ministry requirements will develop and depend on individual projects.

In Romania, as in the USSR, foreign trade is a state monopoly and conducted through foreign trading corporations. The Chemical Ministry has nine foreign trading organizations reporting to it. Of these, the most important to Americans interested in selling to Romania is Romchim which is responsible for the import of the entire chemical industry.

Overall coordination of foreign trade as well as commercial policy is the responsibility of the Ministry of Foreign Trade. Minister Pretor Popa there stressed the desire of his country to increase trade with the United States, but raised the present problem of finding ways to export to the United States in order to obtain the means for paying for Romanian purchases abroad. He suggested the possibility of joint Romanian - U.S. participation as one alternative. Joint efforts were particularly desired in large plant undertakings and in industries directed toward exports.

Again, as in the Soviet Union, lack of Export-Import bank financing, most-favored-nation treatment, and the restrictions imposed by export control, were all cited as having had inhibiting effects on trade. But equally important are Romania's scarcity of hard currency, its greater distance from the United States as compared with other Eastern European countries or even Western Europe, and Romania's desire to bring into balance its trade with the U.S.

Romania is looking to the United States to supply many of its technological needs as it has a high respect for American equipment, products and processes.

U.S. firms, however, will have to be more aggressive in their efforts to secure an increased portion of this market, because of Soviet, Eastern European and other free world competitors—especially the Germans and Japanese. Of interest to the mission's members was the fact that the third largest importer of Romania's products is Mainland China.

Washington's

# Official Trade Briefs

*This article is another in a series of monthly reports outlining actions by domestic, foreign, or international agencies affecting world trade, as compiled by the Legislation and Tariff Analysis Division of the Bureau of International Commerce's Office of International Trade Policy, and by the BIC Office of International Investment.*

## THE PRESIDENT

**1972 Military Procurement Authorization:** On Nov. 17, the President signed Public Law 92-156. Included in the new statute is a provision which, in effect, permits the resumption (after Jan. 1, 1972) of chrome ore imports from Rhodesia, currently embargoed in accordance with a 1966 UN resolution. Prior to the embargo, Rhodesia was the United States' largest single supplier of metallurgical grade chrome ore. Since 1967, however, major foreign suppliers have been the Soviet Union, Turkey, and South Africa.

**Duty Suspension Act:** On Nov. 18, the President signed P.L. 92-161, extending until November 1973 the suspension of duties on certain silks.

**Export Credit, Romania:** American exports to Romania will soon be eligible for financing support from the Export-Import Bank. Authority for this change is pursuant to President Nixon's determination, announced on Nov. 30, that the extension of Eximbank credit facilities for exports to Romania is in the national interest. Such a determination is required under the Export-Import Bank Act of 1945, as amended.

The change will be implemented as soon as guidelines covering the extension of Eximbank and FCIA facilities to Romania are final.

In the past, Eximbank was prohibited from financing exports to any Communist country (except Yugoslavia). This prohibition was lifted, however, under a provision of the Export Expansion Finance Act (P.L. 92-126), signed into law on Aug. 17. Romania and Yugoslavia are at present the only Communist countries eligible for Eximbank financing support.

General information on exporting to Romania can be obtained from the Commerce Department's Eastern European Division in the Bureau of International Commerce. Inquiries on specific, pending transactions also may be directed to that Division, or, in the case of larger export sales, to a special unit in the Bureau, the Office of International Business Assistance.

**Oil Import Program:** The White House recently issued Modifying Proclamation No. 3279, regarding certain changes in the oil import program and their impact on national security.

**Revenue Act of 1971:** On Dec. 2, conferees from the Senate and House reached agreement on H.R. 10947, the proposed Revenue Act of 1971. As reported by the conference committee, Title V of the act includes a modified Domestic International Sales Corporation (DISC) proposal which permits U.S. firms a tax deferral on 50 percent of DISC profits, provided they are reinvested in the company's export operations. The conferees also removed from the bill two provisions of the Senate version (Titles VI and VII) which would have given the President additional discretionary authority to restrict imports.

**Phase Two Import Prices:** Impact of Phase Two regulations for importer's pricing policies has been clarified by explanations issued by the Internal Revenue Service. The import surcharge is treated in the same manner as during the freeze. The surcharge on imported goods or components may be passed on dollar for dollar to the consumer.

Regarding the basic price levels of imported goods, they become subject to scrutiny by the Price Commission after the entry of goods into the United States. The first sale of an import into the customs territory of the U.S. is exempt from price regulations. The price may be whatever is agreed upon between the foreign exporter and the U.S. importer.

When the importer sells the article to a U.S. purchaser, that sale is subject to control, regardless of whether the product is physically transformed by the seller or incorporated into another product. At this point the rules of the Price Commission apply. The sale price may be raised above the base price established during the freeze to reflect cost increases on the part of the foreign manufacturer and subject to adjustments for productivity gains. Consideration will be given to increases in the world market price of a commodity as a basis for raising the U.S. price.

However, the American importer's own profit margin as a percentage of sales, before income taxes, may not be greater than the average of the best two of the last three fiscal years prior to August 15, 1971. The general effect of Phase Two price regulations, then, is to allow importers to pass on most foreign cost increases, but to restrict inflationary price markups in the U.S.

## CONGRESS

**Committee Action:** On Nov. 5, the House approved H.R. 8293, extending the International Coffee Agreement Act of 1968 until Sept. 30, 1973. The proposed legislation is now awaiting action by the Senate Finance Committee. Also passing the House was H.R. 640, permitting the duty-free importation of upholsterers' needles, regulators, regulating needles and pins.

In another action, the House Ways and Means Committee ordered reported the following trade-related bills: H.R. 7175, limiting, on certain vessels, the application of duties imposed on equipment, repairs and repair parts made to U.S. vessels overseas; and H.R. 11186, exempting from duty certain equipment and repairs made for vessels operated by or for any agency of the U.S. where the entries were made in connection with vessels arriving before Jan. 5, 1971.

**Other Legislation:** Through Dec. 1, approximately 360 trade and related bills were introduced in the 92nd Congress. Of these, 115 were import quota bills and 26 were general orderly marketing bills, applicable when imports surpass stated levels of consumption.

Legislation not previously reported in this column includes: H.R. 11508, amending the Foreign Assistance Act of 1961 to expand American exports by utilizing U.S.-owned foreign currencies to pay import duties on such goods; H.R. 11567, amending the Tariff Act of 1930 to exempt U.S. aircraft entering and leaving Canada from overtime payment to U.S. Customs officers on weekends and holidays; H.R. 11583, amending the Fair Packaging and Labeling Act to provide that manufacturer's names and place of business are disclosed; S. 2815, prohibiting the importation, manufacture, sale and purchase of handguns except by certain members of the armed forces, law enforcement officials, licensed importers, manufacturers, dealers and pistol clubs; H.R. 11696, suspending the duty on fluorspar until Jan. 1, 1974; H.R. 11743, amending Title III of the "Buy America" Act with respect to determining when the cost is unreasonable and to define when goods have been produced, manufactured, or mined in the U.S.; H.R. 11864, relating to the appraisement of certain metalworking machines; S. 2879, authorizing the President to agree to change the par value of the dollar; and H.R. 11930 amending the U.S. tariff schedules with respect to the rate of duty on sets of tuned bells.

## TARIFF COMMISSION

**Escape Clause Investigation—TV Receivers:** In a recent report to the President, the Tariff Commission found that television receivers and parts thereof were not being imported into the United States in such quantities as to seriously injure the domestic industry. The negative determinations of Chairman Bedell, Vice-Chairman Parker, and Commissioners Sutton, Leonard, and Young were based on evidence that concessions granted under trade agreements were not the major cause of increased imports. The Commissioners also pointed to their March 1971 antidumping investigation of television receivers from Japan in which the Commission determined that such imports were causing injury to domestic producers. As a result of the earlier decision, Treasury issued a finding of dumping and has subjected such receivers to a dumping duty in appropriate instances.

Commissioner Moore, dissenting from the views of the other Commission members, stated that imports would not be at their present level (and price) "but for" trade agreement concessions.

The Commission also opened a new escape clause investigation to determine whether the domestic industry is being injured by increased imports of microscopes, apparatus and parts, specified under items 708.78, 708.82, 851.60 and 851.65 of the Tariff Schedules. A public hearing will be held at 10 a.m. Feb. 8, 1972 in the Hearing Room of the Tariff Commission.

**Adjustment Assistance—Firms:** Since the last publication of "Trade Briefs" the Tariff Commission issued an affirmative finding in its investigation of Bibb Manufacturing Co., of Macon, Ga., a manufacturer of yarns and fabrics. Following the Commission announcement, however, Commissioner Leonard sent a letter to the President in which he disassociated himself from the decision of the Commission, alleging irregularities in the investigation.

In other actions, the Commission reported two negative determinations and one evenly divided decision in three investigations initiated in late September. As a result, the following firms are ineligible to apply to the Secretary of Commerce for adjustment assistance: Rex Tanning Corp., Peabody, Mass. (tanning bovine leather); and Dave Aronoff Shoes, Los Angeles, Calif. (women's and misses' footwear). The Commissioners were evenly divided in their investigation of alleged import injury to the J. H. Bonck Co., of New Orleans, a manufacturer of men's and boys' shirts. Affirmative determinations were made by Chairman Bedell and Commissioners Sutton and Moore. Those voting in the negative included Vice-Chairman Parker and Commissioners Leonard and Young. In the case of an evenly divided decision, the President may consider the finding of either group as the finding of the Commission.

**Adjustment Assistance — Workers:** In its reports of six investigations on behalf of worker groups, the Tariff Commission found in four cases that the criteria establishing eligibility for adjustment assistance were not met. Those involved in the negative determinations included workers at the following plants: Beaunit Corp., Childersburg, Ala. (viscose rayon yarns); Dave Aronoff Shoes, Inc., Los Angeles, Calif. (women's and misses' footwear); Seymour Shoes, Inc., Haverhill, Mass. (women's dress shoes); and Vulcan Corp., Portsmouth, Ohio (heels for women's footwear).

As a result of two positive determinations, workers at the Birmingham, Ala. plant of Avondale Mills (broadwoven polyester-cotton fab-

rics) and workers at the Macon, Ga., plant of Bibb Manufacturing Co. (yarns and fabrics) are now eligible to apply to the Secretary of Labor for adjustment assistance certification. In the case of Bibb Manufacturing, however, Commissioner Leonard disassociated himself from the finding of the Commission (see above).

The Commission also opened new investigations into the effect of imports on four petitioning groups of workers at the following plants: Utica Cutlery Co., Utica, N.Y. (stainless steel table flatware); Grenet Footwear, Inc., Miami, Fla. (women's and misses' footwear); U.S. Fiberglass Division of the Gladding Corp., Miami, Fla. (fiberglass fishing rods); and General Instrument Corp., Newark, N.J. (diodes).

**Dumping Cases:** The Tariff Commission recently initiated investigations to determine injury in connection with two cases referred by Treasury: ice cream wafers from Canada and diamond phonograph needle tips from the United Kingdom. Public hearings are scheduled for Dec. 14 and Jan. 11, respectively.

**Section 337 (Unfair Import Competition) Cases:** On Nov. 26, the Tariff Commission instituted a preliminary inquiry into a complaint by Scott and Williams, Inc. of Laconia, New Hampshire, that two foreign suppliers and four domestic firms were engaging in unfair trade practices in the importation and sale of closed-toe circular hosiery knitting machines and devices which are allegedly within the claim of a patent owned by Scott and Williams, Inc. If its investigation sustains the petitioner's claim, the Commission could recommend to the President that these machines and devices be temporarily excluded from entry into the United States.

## OTHER AGENCIES

**Treasury—Dumping Cases:** In recent dumping investigations, Treasury announced sales at less-than-fair value determinations for ice cream sandwich wafers from Canada and diamond phonograph needle tips from the United Kingdom (see above). In addition, appraisement has been withheld on elemental sulphur from Mexico and asbestos cement pipe from Japan. Appraisement is withheld when the Secretary of Treasury has reason to believe that the items in question are being sold in the United States at prices below those found in the home market of the exporting country.

Treasury also announced a final discontinuance of its antidumping investigation of pentaerythritol from Italy. In July, a tentative discontinuance was issued after the Italian manufacturer responsible for all exports of this product to the U.S. cancelled his outstanding contracts and offered formal assurances that there would be no future sales of pentaerythritol for export to the United States. Since the last "Trade Briefs," Treasury ordered new antidumping investigations on deflection yokes from Japan (a component used in the production of color television receivers) and on high speed tool steel from Sweden.

**Commerce — Adjustment Assistance:** The Commerce Department has certified the Utica Cutlery, Utica, New York, and the Whittier Mills Co., Atlanta, Georgia, as eligible to apply for adjustment assistance. Application from Utica, a manufacturer of stainless steel flatware, knives and cutlery followed a unanimous Tariff Commission finding of import injury (see *Commerce Today*, Sept. 6). In the Whittier Mills case, application followed a 4 to 2 Tariff Commission finding of injury (see *Commerce Today*, Nov. 15). The firms, the 15th and 16th designated by Commerce to qualify for adjustment assistance under the import injury criteria of the Trade Expansion Act, must now submit an adjustment assistance proposal designed to contribute materially to their economic development and to meet other legal criteria. Under the adjustment assistance program, eligible firms are authorized by the Department of Commerce to receive an appropriate mix of technical, financial, or tax assistance.

**Labor — Adjustment Assistance:** The Labor Department recently announced that 400 workers at the Birmingham, Ala., plant of Avondale Mills have been certified as eligible to apply for adjustment assistance. The certification announcement follows a mid-November finding of import injury by the Tariff Commission (see above).

**Agriculture—Fruit and Vegetable Imports:** Pursuant to provisions of Section 8e of the Agricultural Marketing Agreement Act of 1937, as amended, the Department of Agriculture has revised grade requirements for imported limes, effective Nov. 15. In addition, Agriculture extended until Jan. 31 the deadline for receipt of comments on a proposal to issue grade, size and maturity requirements governing the importation of raisins.

**Eximbank—Discount Loan Program:** Eximbank has announced the liberalization of its medium-term (one to five years) discount loan program and has proposed expanding it to include short-term loans as well. The program is designed to provide commercial banks with immediate cash for their export loans, thus providing them an incentive to give priority to export financing during periods of tight money.

One of the changes in the medium-term program is the elimination of the minimum rate on discount loans. Another involves an extension of the validity period of the Bank's advance commitment to discount a specific loan: the period will now correspond to the full maturity of the loan. Thirdly, the Bank has established a uniform discount spread of 1 percent to cover loans that are Eximbank-guaranteed or FCIA-insured as

well as those that are not. Formerly, guaranteed and insured paper was discounted at a less favorable spread.

The Bank has also proposed expansion of the Program to provide financing for short-term (under one year) export loans. Implementation of this proposal is contingent on legislation now pending before Congress.

**Federal Reserve—Export Credit Exemption:** The Board of Governors of the Federal Reserve System has announced that export credits will be exempted from coverage under its Voluntary Foreign Credit Restraint guidelines. The Board also outlined revisions in its formula for calculating the ceilings on non-export lending by financial institutions subject to the program as well as technical changes in its guidelines.

The Federal Reserve's action was taken in accordance with a provision of the Export Expansion Finance Act of 1971, which was enacted in August. The restraint program, which was established in 1965, formerly involved limitations on most lending to foreigners by banks and non-bank financial institutions. The Act removed the Federal Reserve's authority to restrict export financing. However, Congress gave the Board time to modify the program to implement the exemption and to make the changes required to continue the program for non-export financing. At the end of September, approximately $1.6 billion of export credits were held by banks reporting under the restraint program.

## AMA Sets January Seminar On Foreign Exchange Topics

The American Management Association will hold a seminar on Fundamentals of Foreign Exchange Jan. 17-19 at its headquarters in New York.

**Write:** American Management Association, Inc., 135 W. 50th St., New York, N.Y., 10020 (phone 212-586-8100).

## Trade Fairs, Centers

# Three U.S. Trade Centers Seek Exhibitors For Shows

U.S. exhibitors are being recruited for these three shows scheduled in U.S. Trade Centers during the first half of 1972.

**Advanced medical electronic instruments, Japan:** The U.S. Department of Commerce will sponsor an exhibition of Advanced Medical Electronic Instruments and Equipment at the U.S. Trade Center in Tokyo, Feb. 21-26. While four medical instrumentation and equipment shows have been held previously at the Tokyo Trade Center and recorded impressive sales results, this will be the first specialized exhibtion of this nature. Market research in Japan indicates solid sales potential for more than 50 U.S. products in this area.

Japan's 1969 imports of medical electronic equipment reached almost $2 million, nearly 50% of it from the U.S. During recent years import growth has averaged 40%.

Seven hundred new hospitals and 26,000 clinics are scheduled for construction in Japan between 1970 and 1975. U.S. equipment enjoys an enviable reputation for quality and advanced technology.

For further information or to reserve space, telephone Randall Miller at 202-967-3363, or write: BIC-924, U.S. Department of Commerce, Washington, D.C. 20230.

**Hotel and restaurant equipment, Scandinavia:** A Feb. 21-26 exhibit at the U.S. Trade Center in Stockholm is expected to draw from throughout Scandinavia planners of large catering chains; owners, operators and managers of hotels, motels, restaurants, canteens and cafeterias; hospital planners, purchasing agents, and kitchen superintendents; school administrators; and defense supply officials. Importers and distributors of related products will also be invited.

Despite Sweden's self-sufficiency in many products related to the theme of this show, market research shows that American hotel and catering equipment is competitive with locally produced products and with imports from third countries. Well over 60 U.S. companies in this field are represented in Sweden—47 in the food-preparation equipment area; 15 in maintenance equipment; and at least 6 in hotel equipment.

To sign up for this exhibition, contact John R. Crown II at 202-967-4421 or write: BIC-946, U.S. Department of Commerce, Washington, D.C. 20230

**Materials Test and quality control equipment, France:** Prospects for the sale of U.S. materials test and quality control equipment are especially bright in France, and U.S. suppliers will be able to display their products in this market at an April 17-21 exhibit at the U.S. Trade Center in Paris.

French producers have been unable to meet the growing demand, and requirements for nondestructive test equipment are supplied chiefly through imports from the United States and Germany. Imports, currently running at $22.5 million per year, are estimated to equal 45% of French production, and are expected to increase by $2 million annually.

The exhibition offers U.S. firms an ideal opportunity to capture a large share of the French market, as technicians and buyers in France rely on such trade shows to see new developments.

For information on how to participate, call Charles M. Whitley at 202-967-4961, or write him at BIC-946, U.S. Department of Commerce, Washington, D.C. 20230.

INSIDE AND OUT—*Interest was high in all the exhibits at the second U.S. Industrial Machinery Exhibition in Seoul, where blue ribbon buyers turned out in large numbers and ordered more than $25 million in U.S. equipment on-the-spot.*

# Seoul U.S. Industrial Machinery Show Brings Record Sales For 52 Exhibitors

Exhibitors at a recent U.S. industrial Machinery Exhibition in Seoul can testify that Korea's great economic success story of the 1960s is continuing into this decade. The 52 U.S. firms made more than $25.8 million on-the-spot sales and expect to make another $20.6 million in the next year as a direct result of their participation.

The off-the-floor sales figure was a record for U.S. exhibitions overseas, and the projected sales constituted an all-time high for a U.S. show in a developing nation.

## Impressive figures

The largest single sale made during the exhibition was $1.6 million, while Leesona Corp. of Warwick, R.I., reported writing tentative orders which could result in as much as $6.5 million in business.

Products exhibited included machine tools and metalworking equipment, office machinery and computing equipment, power hand tools, food processing and packaging equipment, medical equipment and pharmaceuticals, pumps, valves and compressors, and scientific control, testing and measuring instruments.

Five agents or distributors in Asian markets were appointed during the show and exhibitors were negotiating with 25 others as the show closed. A total of 6,957 visitors registered. The exhibition turned up 6,241 sales leads for exhibitors.

The success of the show was advanced by substantial sales financing arranged by the Export-Import Bank with the Korean Exchange Bank. This included an $8 million Eximbank relending credit for certain product lines and, under the cooperative financing program, an $8 million Eximbank credit to the KEB with $8 million more coming from the Bank of America with an Eximbank guarantee.

Also, provision was made for representatives of the Seoul branches of Bank of America, Chase Manhattan, and First National City Bank (N. Y.)—all of which have cooperative financing arrangements with Eximbank—to be on the scene.

## 'Excellent exposure'

"We feel the exhibit enabled our company to achieve excellent exposure of Recordak microfilm systems to many Korean business and government leaders," commented the Eastman Kodak representative. "Undoubtedly the exhibit provided a worthwhile fillip to the American business presence in Korea."

"We can only compliment the organizers," said the APECO Corp. representative. "Perhaps some more specific clarifications on financing of equipment would be advantageous. The show brought unexpected results."

Wang Laboratories declared it an "excellent, well-managed show."

Officials of Milwaukee Electric Tool Corp. commented that "Numerous leads for agent applications were presented, and the management was very helpful with marketing and sales opportunities."

## Worldwide Business Outlook

# French Growth Is Slowing, But Tops Most Competitors

France's economic growth is slowing, due to counterinflationary policies, a pause in the investment boom and dampened demand for exports.

This slowdown will continue into 1972, when the real growth rate is projected to decline to 5 percent, according to reports from the U.S. Embassy in Paris. Still, France is continuing to expand more rapidly than its principal trading partners.

### Growth detailed

The real value of French gross national product will show a gain of close to 5.4 percent in 1971, reaching a level of $164 billion. Such a performance compares favorably with the overall 3.5 percent growth rate of the major industrial countries that are members of the Organization for Economic Cooperation and Development. But it is lower than the 6.1 percent growth rate of 1970, and short of the 6 percent target of the current Economic Plan.

Since the fall of 1970, the strongest component of demand has been consumption. Real household consumption will grow approximately 6.3 percent this year, as compared with 4.5 percent in 1970.

The real value of agricultural production will only increase 2.4 percent this year, but industrial production trends are more consistent with national account projections. During the first nine months in 1971, industrial production grew irregularly, at an annual 6 percent rate. Production of consumer goods rose more rapidly than the average while other branches of industry expanded more slowly.

All major components of GNP, except fixed investment, should grow more slowly in 1972. Consistent with such forecasts, French businessmen now view economic conditions more pessimistically than in the spring. During the coming months, they generally expect slightly smaller production increases, lower inventories and reduced order backlogs. Only consumer goods producers are bullish about prospects for the near future.

A sluggish growth rate is not the only economic problem French policy makers face. They are also still searching for ways to moderate price increases without producing socially unacceptable levels of unemployment. Until now, as in most developed nations, policies to extricate France from the horns of this dilemma have proved to be elusive. Since 1969, inflation has persisted, despite rising unemployment, counterinflationary economic policies and, more recently, an absence of excess demand.

### Inflationary fuel

The present French inflation is fueled principally by attempts to maintain profit margins at a time when firms are granting large wage increases. Given the social climate prevailing since the disturbances during the spring of 1968, the French Government has put little pressure on unions to moderate wage demands.

It has also sanctioned a number of wage contracts which guarantee workers specified annual increases in real purchasing power. In 1971, for the first time, this type of "wage indexing" spread outside public service industries.

At present, average hourly wages in industry are rising at an annual rate of 10.7 percent, almost double the 5.5 percent increase in industrial productivity predicted for 1971. The result has been a severe wage-price spiral. Retail prices are currently increasing at a high annual rate of 5.6 percent, which is, however, very close to the average for all OECD countries.

In formulating economic policies for 1972, the Government has, therefore, given priority to reducing retail price increases to 4.3 percent. The policy mix includes a number of instruments for meeting this ambitious target.

► In September, the Government presented a balanced budget for 1972, in which both expenditures and revenues were projected to grow at the same rate as GNP. The budget contains only minor changes in the French tax system. It does, however, give considerably greater emphasis to civilian investment expenditures than its 1971 counterpart.

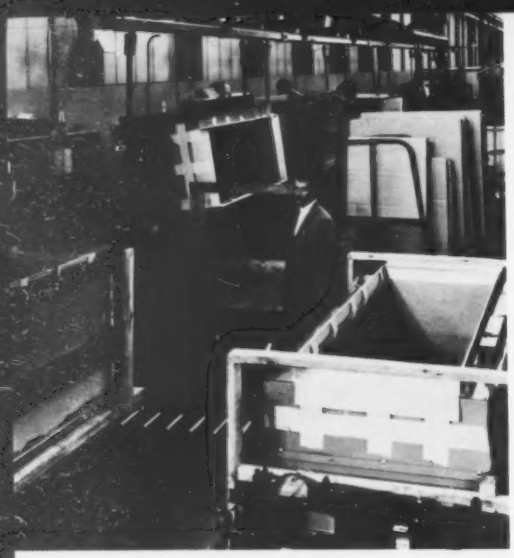
► In order to curtail expansion of the money supply, the French authorities have progressively tightened monetary policies, principally by raising the reserve requirements of commercial banks.

► On Sept. 15, the Ministry of Finance concluded a new price control agreement with the Association of French Employers. It limited manufacturers' price increases to an average 1.5 percent in the six-month period ending March 15, 1972. It also froze current profit margins on retail sales of industrial goods.

► Early in November, the Ministry also moved against food price increases by restricting distributors' profit margins for four food products—ham, bananas, chocolate and eggs. This is significant since food prices have been rising considerably faster than those of industrial goods and almost as rapidly as service prices.

### Success uncertain

At this point, the success of these policies is uncertain. If wages continue to increase rapidly, it may be difficult for employers to meet price control commitments. In addition, two events in 1971 illustrated the



**FRENCH AFFILIATE**—*Assembly-line methods are used in automated Ascinter-Otis Elevator Co. plant at Gien, France.*

pitfalls encountered in carrying out effective counterinflationary policies.

First, because of an unanticipated shortfall in tax receipts, actual expenditures of the French Government in the first seven months of the year exceeded revenues by $1.3 billion. Second, the supply of money and near money grew 9.2 percent in the first eight months of 1971.

## Another obstacle

Another, and perhaps more serious, obstacle in the path of French anti-inflationary policies is mounting unemployment. The French economy has not been operating at full employment since late 1970 and it will be difficult to stem the tide of inflation without putting still more people out of work.

The above trends have conditioned French response to the current international monetary crisis. Exports are seen as an important element in French expansion. The French authorities are, therefore, intent on maintaining their competitiveness, which has recently been enhanced by changes in currency parities since 1969, particularly the devaluation of the franc and the revaluation of the mark; strong increases in French productivity; and the slow growth of French export prices (3 percent in 1971).

French external economic policy is also designed to avoid inflationary pressures generated by capital inflows. After weighing both considerations, the Government took the following actions after the announcement of the new U.S. economic program on Aug. 15.

On Aug. 21, it established a double exchange market. In the market handling commercial transactions, the official parity of the franc is defended within customary margins. All other transactions go through a separate financial market where exchange rates are determined largely by market forces. The dollar discount in the financial market has averaged 2 percent.

The Government also loosened exchange controls somewhat. In particular, there are no longer any restrictions on capital transfers to finance direct investment abroad. In addition, it abolished the special foreign security exchange market, thereby facilitating French portfolio investment overseas.

Finally, it imposed limitations on the duration of credits which French importers can accept from foreign suppliers, with a view to curbing speculation on a revaluation of the franc.

This program has successfully insulated France from the effects of the current crisis and has provided France with a strong position during current negotiations on exchange rate realignment. French exports have benefited from an effective devaluation of the franc amounting to 4-5 percent. France is also one of the developed nations least hurt by the U.S. import surcharge, which affects less than 5 percent of French exports.

The overall French balance of payments, which was strong in 1970, will show similar results for this year. Net flows from abroad into official accounts totaled $2.5 billion in 1970 and $2.8 billion in the first 10 months of 1971. The major factor in these spectacular gains was capital movements. In 1971, as in 1970, the trade account should show a moderate surplus.

According to official projections, the French balance of payments position should remain strong in 1972 unless failure to resolve the current crisis touches off a general European recession. Events since Aug. 15, have, nevertheless, produced a mood of uncertainty in French business circles.

After shooting up a record 30 percent in 1970, French imports from the United States stagnated in 1971. In absolute terms, their value was roughly the same ($1.4 billion) during the first nine months of the year as in the comparable period of 1970. At the same time, the U.S. share of the French market dropped from 10.1 percent to 9 percent. In sharp contrast, over the same period, French exports to the United States rose 28 percent.

In 1971, America's principal foreign competitors have not improved their shares of the French market. The proportion of French imports coming from EEC nations has, for example, remained approximately 48 percent. The leveling off of U.S. exports to France must, therefore, be attributed principally to the changing composition of French demand. The demand for investment goods, the area in which the United States is particularly competitive, has been sluggish.

## Improvement in 1972

The U.S. position in the French market should improve in 1972 since: changes in relative currency values should make U.S. goods more competitive; French demand for investment goods will assume more importance relative to consumer goods; and a number of French Government programs and trends in individual industries appear favorable to U.S. exports. In particular:

► The $35-40 million a year market for mini-computers is expanding 30-35 percent annually.

► The French Government is currently spending $1 billion a

year to upgrade communications facilities. This will buoy demand for U.S. telecommunications equipment, particularly data transmission equipment.

► Sales of sophisticated electronic instruments will also enjoy continued growth since the French Government is increasing grants to government laboratories for purchases of scientific equipment. Subsidies to French instrument manufacturers for research and development are also rising.

► The demand for steel mill equipment remains high as investment in the large new Solmer steel complex at Fos, near Marseilles, moves forward (*Commerce Today*, July 26, pages 44-45).

► The Government is providing low interest loans for construction and modernization of hotels and motels. This will create additional demand for items such as wall papers, hard surface floor coverings, exterior paints, commercial cooking equipment, catering equipment, specialized plumbing fixtures, heating equipment, vegetable and mineral fiber ceilings, room airconditioning units and hotel furniture and furnishings.

► The report of the Sixth Plan Committee on Mechanical Industries recommends a major effort to modernize and automate machinery in this sector. Development of the chemical industry, which will offer special opportunities for U.S. suppliers of chemical process and process control equipment, is another area of concentration recommended in the plan.

► U.S. exports of soybeans and soybean meal will benefit from increased use of compound feeds as a part of government programs to encourage beef and pork output.

► There is general demand for U.S. leather and sheep-lined clothing, marking devices, knitwear, toys and games, frozen foods, costume jewelry, house trailers, canned fish, canned meats, canned sausages, meat sauces and pickled products.

# New Netherlands Coalition Acting Against 'Stagflation'

The Dutch economy continues to settle more deeply into the condition called "stagflation."

Wages and prices thus keep on rising at a disturbing rate while gross national product and investments are leveling off, as a result of weaker profits and uncertainties about the future, leading to higher unemployment. Deficits in the current balance of payments and the budget have increased.

## Anti-inflation effort

The new relatively conservative Government has taken action to curb inflation by restraining demand and its effect on wages, prices and the balance of payments. Taxes were increased, budget-supported programs curtailed, talks begun on wage-price limitations, and monetary measures taken to discourage certain investments and the inflow of hot money.

The anti-inflation effort, says the U.S. Embassy in The Hague, will require 1972 retrenchment of government and business outlays. Industrial investment will probably decline in real terms and unemployment will increase. These trends could take the steam out of the wage price spiral by mid-1972. A continuing but smaller deficit in the balance of payments on current account is also likely, but real GNP in 1972 may rise no more than 3 percent, compared with a projected 5 percent in 1971.

Estimated production increases in 1971 are smaller than in 1970 for the more important sectors. Overall industrial output is increasing 7.5 percent as opposed to 9 percent last year; the decline would be greater were it not for buoyant natural gas production.

Oil refining, paper and metal industries have been static, while chemicals are showing a 7 percent increase, much less than in previous years. Services are growing moderately, in contrast to strong growth last year, in line with private consumption trends.

The 5 percent increase in agricultural production, owing to favorable weather, surpasses the long-term trend. Construction, increasing a bit faster than last year, is favored by official support for home building.

The cost price squeeze on profits governs the present outlook for business and industry. With wages up 14 percent in 1971 and demand weakening, especially for investment goods, most manufacturing industries face a difficult year in 1972.

The guilder float and softening in main Dutch export markets suggest that export sales will also level off. Profits have averaged low in 1971 half-year reports—as exceptions, Shell and Unilever showed moderate improvements over 1970—and the Amsterdam stock price index dropped in September below the 1963 index base.

Investment continues to increase, though at a reduced rate, owing to large aircraft purchases and ongoing construction. Reduced profit expectations are expected to reverse the investment trend next year, however, causing a 5 percent drop. In line with its objective of reducing demand, the Government has suspended investment subsidies except for northeast provinces and south Limburg.

The slowdown in investment and consumption will affect trade, and the increase in imports for 1972 is expected to be just over half of the 13 percent increase estimated for 1971, a long way from the 22 percent increase in 1970. American exports will suffer, as will Holland's other suppliers.

The slowdown in investment may hurt U.S. exports of heavy

machinery, sophisticated electronics, and basic instrumentation and equipment for process industries, but a permanent revaluation of the guilder would make U.S. products more attractive in price.

Dutch imports from the United States have so far increased only 5 percent, but the U.S. market share should remain near 10 percent.

## Great interest

American exporters will continue to find great interest in the following producer goods:

Electronic data processing equipment, particularly peripheral items and software packages; food processing and packaging equipment; environmental control equipment and instrumentation; general industrial instrumentation; petroleum and gas drilling and transportation materials.

Also machinery and raw materials for the chemical and metallurgical industries; marine cargo handling equipment; printing and graphic equipment; air, rail, road and marine transportation equipment, particularly for bulk chemicals; and building equipment and supplies.

The shortage of labor and rising consumer income form the basis for continuing demand for American equipment and expertise in consumer service industries such as hotels, fast food chains, laundries and dry cleaners, and vehicle maintenance shops. Dutch interest in this type of service enterprise gives rise to opportunities for franchising, joint ventures, or sales of related equipment.

American exporters can compete for sales of certain processed consumer goods, although there is heavy European and oriental competition, relatively high EEC import duties, and the transportation cost disadvantage for U.S. products. Categories where U.S. exports remain competitive are high fashion apparel, sophisticated educational materials and training aids, certain drugs and pharmaceuticals, selected household appliances and kitchenware, and do-it-yourself tools.

Concern about industrial air, water and noise pollution continues to grow. Projects involving heavy installations, especially in chemicals and refineries, receive close public scrutiny, and existing establishments are receiving second looks.

Under public pressure, Rotterdam earlier this year disapproved construction of a steel mill by Hoogovens and Hoesch on reclaimed land in Europort. More recently, a nearby community instituted action to close down a new U.S. polyethelene plant owing to noise and light caused by an emergency flare. While the company has avoided a shutdown, it had to make a large investment to correct the problem. Firms planning facilities in Holland must therefore be prepared to meet increasingly stringent pollution control regulations enforced by agencies sensitive to public opinion.

## A positive view

The other side of this growing concern about environmental quality is the market being created for American technology and equipment designed to deal with pollution problems. A combination seminar and trade mission on environmental control was held in Rotterdam under U.S. auspices last May and is expected to pave the way for substantial sales of U.S. equipment.

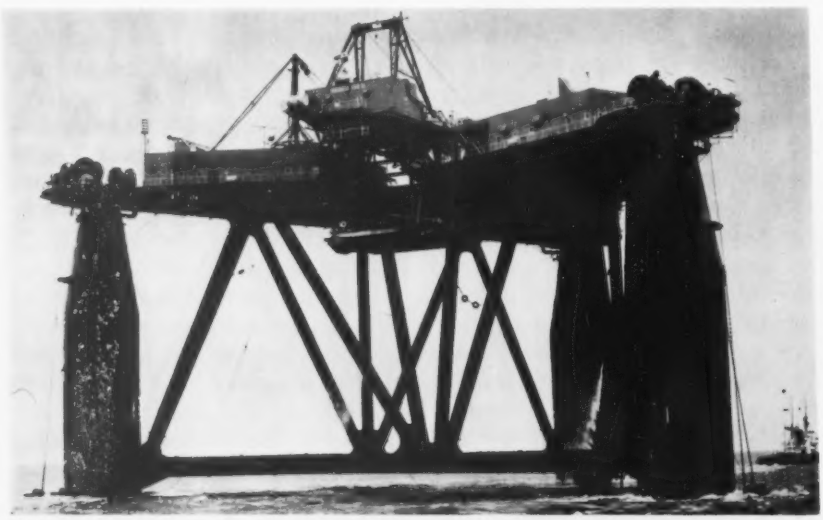
The Netherlands remains a leading market for U.S. agriculture. In 1970-71, a record year, U.S. agriculture exports rose to more than half a billion dollars.

Owing to the dock strike and currency float, it is impossible to estimate accurately the Dutch market for U.S. agricultural goods in 1971-72, but those exports will decline significantly.

It seems unlikely that new American investment in Holland, most of which is motivated by long-term potential of the surrounding market, will be greatly affected by the short-term movement toward recession.

However, the de facto revaluation of the guilder vis-a-vis some other European currencies and the increases in unit wage costs add a pessimistic note to forecasts of yield from projects.

On the other hand, there is a possibility of relief from the severe labor shortage of the last few years, and the labor scene may be more peaceful than in the recent past.



**EXPORTED DUTCH DRILLING PLATFORM**—*This offshore oil unit, built in the Netherlands, is on a 5,000-mile trip from Rotterdam to Nigeria. Dutch export sales are expected to level off in 1972 due to the guilder float and softer markets.*

# Investment And Consumer Spending Fuel Austrian Economic Expansion

Austria's forward thrust of economic activity seems to be outlasting all the predictions.

The nation's growth rate of 7 percent in 1970 continued at just under 6 percent in the first half of 1971, a pace unsurpassed among the Western industrialized nations.

Considerable increases in domestic investment, primarily new construction, and private consumption have replaced exports as the driving force of the present expansion.

With the exception of a modest decline in demand for energy and transport services and a slight increase in Austria's very low unemployment rate, there is no visible sign that the present slowdown is getting worse. To some extent this could reflect the tendency for Austrian statistics to lag behind reality.

A few businessmen and banking circles have observed that the international monetary uncertainty and the prospect of a serious slowdown in Germany and Italy, Austria's main trading partners, have caused some cancellations or postponements of investment decisions.

## Unexpected advance

Gross national product will probably advance by 5.5 to 6 percent in real terms in 1971, according to the U.S. Embassy in Vienna, compared with earlier estimates of only 4 percent. Allowing for price increases at the level of 4.7 percent, the Austrian GNP should reach AS 411 billion ($17 billion at AS 24.50 = $1).

Economic growth in Austria should be only slightly lower in 1972. The Austrian Institute for Economic Research predicts a real growth rate of 4.25 percent, but only if the present high level of investment, both public and private, holds up and increased consumer spending develops.

Having gained a majority in the national elections last month, the new Socialist Government is expected to devote itself with increasing intensity to the implementation of its 1968 program for the modernization of the Austrian economy. Emphasis will be placed on tax reform (including preparations for the introduction of the value-added tax), environmental protection measures, and development of infrastructure along the lines of a new multi-year government investment program.

Austrian industry is expected to receive a further impetus for rationalization and investment from the expected agreement between Austria and the European Economic Community on some form of a free-trade area. This agreement will probably be reached in coming months, and go into effect on Jan. 1, 1973. However, as the EEC Commission has just received a mandate to negotiate an interim agreement with Austria, 30 percent tariff cuts in the industrial sector could be made as early as Jan. 1, 1972.

The stabilization of prices will continue for the time being to be one of the foremost problems facing the new Government. The Government succeeded in holding the annual rate of increase of the consumer price index to under 5 percent through July, but August and September recorded 5.2 percent and 5.3 percent rates of increase.

The index, however, only approximates the situation and unauthorized price increases have been accumulating rapidly. The Government is therefore seeking new legislation for more effective price controls and intends to tighten the provisions of the existing anti-profiteering law. At the same time, import liberalization measures will be continued in an effort to hold prices down.

Upcoming wage negotiations should further increase domestic price pressures. Collective bargaining agreements for food workers, providing for an average 12 percent increase, concluded the most recent wage round. Most new wage negotiations are not expected to start until the beginning of next year. Unions are expected to set demands for increases of approximately 15 percent. Settlements are expected to range around 10 percent, just slightly higher than the previous wage round (8 percent).

Employers will have a shorter work week (42 hours as of Jan. 1, 1972) to contend with in addition to the wage and salary increases.

Austria's export growth rate has dropped from 21 percent a year ago to 7 percent at present. It is impossible to say to what extent this development has been affected by the 5 percent revaluation of the schilling last May and the new U.S. economic policy. The U.S. surcharge should have minimal effect on Austria since only 4 percent of its exports go to the United States.

## Billion dollar deficit

The growing disparity between export and import trends brought the trade deficit to a record $700 million by the end of August, 50 percent more than a year ago. When the books are closed at the end of the year, Austria may be faced with an unprecedented trade deficit of over $1 billion. Although soaring tourist receipts cover most of the deficit, and long-term capital flows bring it to equilibrium, this imbalance would cause some anxiety if the economy were not running at full speed. As the situation stands, the vast import surplus has helped to keep price pressures within tolerable limits in an otherwise overheated economy.

Since the Government has decided to hold to its policy of liberal imports to ease price pressures, Austrian imports should continue their rapid growth well into next

AUSTRIANS KEEP MOVING—*The economic boom in Austria is continuing despite earlier forecasts of a slowdown. Here, the Vienna-Munich Turnpike.*

year. The greatest growth should be in the areas of consumer goods, vehicles, machinery and equipment for the building industry, and mineral fuels.

## Japan moves in

While Austrian exports followed the usual pattern with shipments to European Free Trade Area countries growing more rapidly than those to the EEC, the development of imports took a completely different course. The advance of Japanese products has assumed remarkable dimensions. During the first eight months of this year, Japan sold 60 percent more in Austria than a year ago. The most spectacular inroad has been made by automobiles, which captured a sizable portion of the market as soon as they appeared in Austria. Electronic equipment, for home entertainment and data processing, optical goods and color film also sold particularly well.

Austria's trade with the Communist COMECON area—once an undisputed asset—is currently causing some worry. The latest data indicate not only that Austrian exports to this area have practically stagnated, but that imports have increased significantly. Thus, Austria's traditional trade surplus with this region has been reduced to a negligible quantity. The basic reason for this imbalance seems to be the growing competition of other Western suppliers where Austria enjoyed a privileged position for so long.

While the startling import growth has led to a considerable trade deficit, new foreign direct investment has grown at an even more rapid rate than in the preceding year, helping to offset the deficit. There was a net long-term capital inflow of AS 1.76 billion during the first eight months of 1971, compared with AS 1.61 billion for the same period in 1970.

The Austrian National Bank's decision to tighten controls on capital inflows during the period of international currency instability by introducing special licensing requirements may somewhat complicate the procedures for foreign investment in the future. The controls are not, however, intended to restrict investment, but to discourage speculation.

The official attitude in Austria toward new foreign investment continues favorable, especially when it benefits the economically more backward areas.

The United States, as a marginal supplier, has benefited particularly from the Austrian import boom. Imports from the United States, which declined 4 percent from the previous year in the first quarter of 1971 and only maintained last year's level in the second quarter, rose sharply in the third quarter of the year.

In September, Austrian imports from the United States exceeded $20 million for the first time.

Austrian manufacturers and traders have shown great interest in recent American trade missions, in U.S. trade center shows and in exhibitions in European trade fairs. Over 100 Austrian businessmen visited the U.S. Business Development Office at the Vienna International Fall Trade Fair, expressing interest in a total of 311 business proposals.

The prospects for American exporters doing business in and through Austria seem to be very promising, especially while the upswing in imports continues.

U.S. prospects are enhanced still further by the decision of the Austrian monetary authorities to allow the schilling to float against the dollar while maintaining parity with other Western European currencies. This action should serve to increase the competitiveness of U.S. products relative to those of the EEC and EFTA.

Marketing in Austria, and especially in Eastern Europe through Austrian intermediaries, demands flexibility and adjustment to local business usage on the part of the American exporter. Needless to say, the market is exposed to sharp competition and a delay in answering a business inquiry may lose the business to another company responding more promptly.

## Further opportunities

Further opportunities for U.S. exporters are apt to develop from the government's policy of encouraging investment for the modernization and rationalization of Austrian industry. As Austria's arrangement with the EEC approaches realization, the threat of intensified competition from more efficient EEC producers should induce increased interest in this type of investment. There are signs that business decisions are already being influenced by this prospect. It thus becomes all the more important for U.S. sellers to move in early to capitalize on these developing trade opportunities.

# Business Confidence Of Dominicans At Peak, Momentum Strong For 1972

Business confidence within the Dominican Republic is at its highest level in recent decades. This is the third straight year of economic upturn, and there are bright signs that the gains will continue.

Even though the Dominican Republic remains a country with an unhappy political legacy and a large assortment of staggering, though not unique, problems of development, an increasing number of Dominican businessmen have never been so hopeful about the economic future.

## Forward motion

The 6.5 to 7 percent rates of growth in 1969 and 1970 and the equally rapid rate thus far this year have created a forward momentum which is expected to dominate well into 1972. Granting of a favorable U.S. sugar quota has added an additional impulse to this atmosphere of confidence.

There is forward motion in all major sectors. Tourism and possibly mining show the greatest potential for providing long-term growth.

The major economic cloud seen on the horizon by the U.S. Embassy in Santo Domingo is balance of payments weakness, since the recent fast economic growth has spurred imports and put considerable pressure on the country's reserve position.

The balance of payments situation is significantly worse than in 1969 and 1970, but not nearly as difficult as it had been for the 1964-68 period.

Imports increased by 25 percent during the first eight months of 1971. A portion of these imports has been financed by foreign investment projects under way in the country, but much of the increase had to be paid for more directly. Exports through the first eight months were up about 16 percent over the same period for 1970 and this increase helped finance some of the sharp import growth. It is hoped that appropriate fiscal and monetary tightening can be applied to bring balance of payments pressures under control without slowing down the economy greatly.

These buoyant economic conditions fully justify an energetic response from U.S. exporters, especially since the country will become a $300 million import market this year. Competitiveness of U.S. products here has increased due to the floating of the dollar and the maintenance of the Dominican peso on a par with it. Renewed and expanded sales promotion efforts for U.S. products in the Dominican Republic are expected to provide a more satisfactory return to suppliers than at any time since 1965.

This reassertion of American supplier interests is already having a positive effect on U.S. sales of a broad line of consumer-household durables, soft goods including sportswear, hardware, construction materials and equipment, industrial raw materials and a broad range of spare parts for consumer and industrial use.

The growth of this market is causing an increasing number of U.S. suppliers to treat the Dominican Republic as a primary point in their regional sales efforts in the Caribbean.

Alternatively, U.S. suppliers with manufacturing facilities in nearby Puerto Rico are more carefully examining sales opportunities for their products in the Dominican Republic and utilizing the lower ocean freight rates available to them.

## Investment incentives

New or revised legislation in the mining and industrial fields, including tax incentives for many types of new or expanding enterprises and for tourism-related industries, will continue to encourage foreign investment. Third-country foreign investment in the Dominican Republic has increased noticeably during the past three years with primary interest in mining, petroleum refining and various joint ventures in light industry.

**DOMINICANS SET FAST PACE**—*The Tavera Dam on the Yaque River, above, is one of two large hydroelectric projects currently under construction in the Dominican Republic. Considerable progress has been made since this recent photograph.*

# Export Growth, 1972 Incomes Talks Vital To Ending Finnish Slowdown

After two years of economic expansion, the Finnish boom is over and only minimal real growth can be expected until at least mid-1972.

Economic activity is slumping even more sharply than expected, primarily due to weakening international demand for Finnish exports. Government projections for 1971 growth in real gross national product have slipped during recent months from 3.5 percent to 1.5 percent.

## Hope for new boom

The most optimistic forecast for growth during 1972 is 3.5 percent. It is hoped that 1973 will bring a new boom, reports the U.S. Embassy in Helsinki.

The outlook for 1972 and beyond depends heavily on the outcome of negotiations to replace the current economic stabilization program, which will expire at the end of March. The present agreement, undermined by strikes in the metal and construction industries, has not kept wages in line with productivity increases.

Due to rapid inflation in other industrial countries, Finnish exports have not yet lost in competitiveness. A crucial factor in preservation of this competitiveness, however, is formulation of a rational incomes policy. Incomes policy negotiations have always been stormy and the upcoming negotiations, in early 1972, will probably be no exception.

In early June the Government imposed a 15 percent temporary supplementary turnover tax on consumer durables, the bulk of which are imported, and an import equalization tax on selected imports, averaging 2.3 percent. Although these measures have restricted imports, the trade deficit continues to worsen due to rising prices of imports and the unexpectedly poor performance of exports.

The trade deficit for the first ten months of 1971 is already $310 million and will undoubtedly exceed last year's record $330 million. The current account deficit will probably at least equal 1970's $226 million.

The 1972 National Budget Proposal assumes continuation of the special taxes through the end of 1972. It now appears that Parliament will not permit extension of the unpopular additional turnover tax. The Government is now considering other ways of restricting imports. Recently a new method of determining the dutiable value of imports was adopted.

## Investment slows

After two boom years, during which gross domestic capital formation rose at an annual rate of 12 percent, investment activity has begun to stagnate. In order to stimulate activity, the Government has freed investment reserve funds held by companies for investments in housing and developing areas and has accelerated withdrawal of countercyclical deposits from the Bank of Finland.

The 1972 National Budget Proposal provides for substantial increase in public investment, particularly housing, and also places the ceiling on state borrowing below the rate of amortization in order to free capital for private investment.

The initial industry reaction to the government measures suggests that they will not have a significant effect. Investment is expected to increase by only 1.5 percent in 1971 and actually to decline in 1972.

Consumer demand continues to rise due to wage increases granted early in 1971, but government measures have chopped the rate of increase of private consumption to one-half of 1970's 6 percent.

The projected growth of consumption is also 3 percent in 1972, but this may be optimistic as unemployment is rising more rapidly than government forecasters had estimated. The number of unemployed may rise to 3 percent of the labor force by the end of the year.

Agricultural overproduction continues as measures to reduce production of one commodity often result in simply shifting the overproduction to other products. Thus, while once alarming surpluses of wheat and butter are now of manageable proportions, 1971 has brought surpluses of pork and eggs. Although the Government has taken measures to cut output and improve marketing, prices have not risen to target levels. The Government will continue to have difficulty with the problem of trimming the agricultural sector.

There has been no change in Finland's objective to seek, because of its policy of neutrality and its special relationship to the Soviet Union, only a limited commercial arrangement with an enlarged EEC. Finnish industry supports government efforts to negotiate a free-trade arrangement, although there is concern about possible delay in inclusion of paper. Finland may also seek arrangements for selected agricultural products. Finnish arrangements with the EEC may increase discrimination against U.S. exports.

## New Government

Ostensibly as the result of dispute over the level of agricultural incomes, the 15-month-old Government of Prime Minister Ahti Karjalainen resigned on Oct. 29. The same day, President Urho Kekkonen appointed an interim Government led by Teuvo Aura, Mayor of Helsinki, and set parliamentary elections for Jan. 2 and 3.

The Aura Government must cope with the severe trade deficit, the

problem of agricultural incomes, and EEC negotiations, and will have to initiate economic stabilization negotiations.

Formation of a center-left coalition Government similar to the Karjalainen Government is expected. This Government will probably not make major changes in Finland's policies. Thus, the current political instability is not expected to affect U.S. interests.

When President Nixon announced new economic and monetary policy decisions in August, Finland, along with most other European countries, suspended defense of the lower limit of the dollar. The value of the dollar in Finnmarks fell only about 0.5 percent and has remained at that level. This, combined with upward revaluation of other European currencies, has marginally improved U.S. competitiveness in Finland.

## U.S. gains

American exports to Finland through September rose $9 million over the corresponding period last year to $94 million, giving the United States a modest surplus in trade with Finland. The new taxes imposed to discourage imports have further diminished prospects for export of consumer goods to Finland.

Aircraft sales continue to make up a substantial percentage of U.S. exports. Prospects for agricultural exports appear unchanged. Good market possibilities exist for high-technology producer goods such as electronic data processing equipment and instrumentation and control equipment.

U.S. participation in the Helsinki International Fair in September awakened great interest in electronics equipment. The small but growing Finnish electronics industry is a good market for electronic production machinery and components. Continued expansion of the petrochemical industry points to sales of chemical raw materials and chemical and plastics manufacturing equipment.

The rapidly growing concern for environmental protection will expand the market for pollution control equipment. Current efforts to modernize and rationalize industry, with emphasis on improving marketing skills, translate into increased demand for management consulting services.

The state-controlled power company Imatran Voima, private industry and the city of Helsinki are planning investments in nuclear power plants. U.S. industry is already participating in construction of a Soviet-supplied nuclear power plant. This area is promising for exports of American goods and consulting services.

The laying of a pipeline to import natural gas from the Soviet Union and construction of a subway in Helsinki are investments of possible interest.

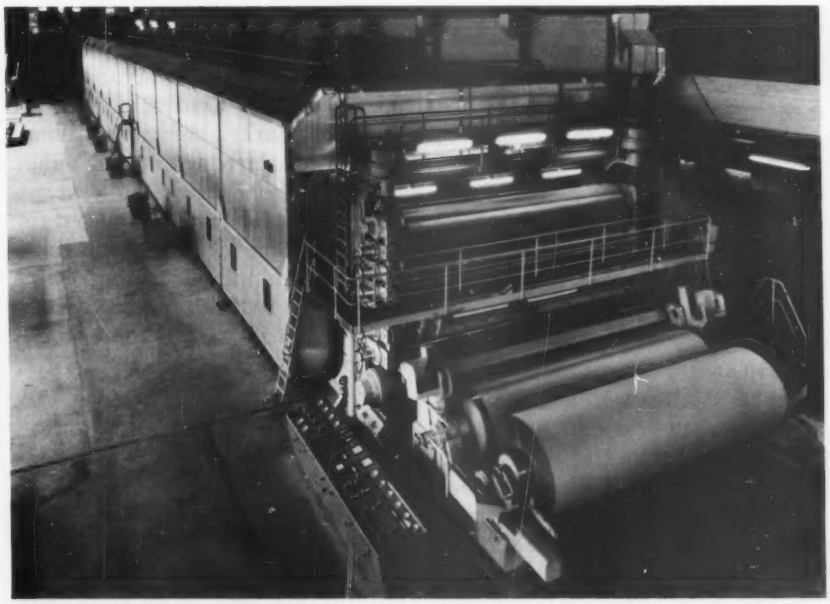
Increased attention should be paid to investment capabilities of state-controlled companies, as they have steadily increased in importance. These companies tend to have readier access to capital, particularly during periods of economic slack, than private companies.

Although the Government warmly encourages foreign investment, there has been little new American direct investment in recent years, due to the relatively small size of the market and uncertainty about Finland's future relationship to an expanded European Community. The bulk of existing American investment is in commerce, with only a small amount in manufacturing.

## Investment slipping

Foreign investment has dropped off since the peak year of 1969. Finland would be a good base from which to expand trade with East Europe.

The travel industry offers prospects for investment. Since 1967, the number of tourists and business visitors has increased 60 percent. If Finland is successful in efforts to promote Helsinki as an international conference center, the travel industry will grow even faster. Planned hotel and motel construction is way up and an Intercontinental Hotel is being completed in Helsinki.



**FINNS WANT TO GET ROLLING AGAIN**—*Incomes talks and the rate of export growth will help determine whether Finland can get another boom started next year. Above, a kraft paper and board mill exported by Oy Wartsila Ab, Helsinki.*

# Six U. S. Posts Analyze Trends For Coming Year

*Following are brief indicators taken from Foreign Economic Trends recently received by the Department of Commerce from U.S. Foreign Service posts in six countries. Over 150 such reports for 117 foreign markets, ranging from 4 to 12 pages each, are received yearly.*

*Annual subscription to the Foreign Economic Trends series may be obtained for $15 from any Commerce Field Office or Supt. of Documents, Government Printing Office, Washington, D.C. 20402.*

**Iceland:** The economic boom which began in 1970 has gathered momentum during 1971, and Iceland is now enjoying the most prosperous year in its history. There is overemployment on the labor market, no price inflation, and an extraordinary rate of economic growth. The estimate for the full year is for a 9 percent increase in real GNP.

Iceland's prospects for next year depend on how the new Government manages to keep inflation under control. Assuming success in this task, a fish catch increase of up to 5 percent, and no decline in world fish prices, there should be some economic growth. However, the rate should certainly be under the 9 percent for 1971 and probably less than the 6 percent growth of 1970.

**Ceylon:** Although a relatively small market, remote geographically from the United States, Ceylon provides distinct opportunities for the sale of American products. The change from private to state trading of many commodities may provide improved access to the market for U.S. exporters as ties with traditional sources of supply may weaken. Promising growth in the tourist industry, which benefits from generous government-backed incentives, may offer additional attractions for U.S. investors and exporters of hotel and restaurant equipment. Although Ceylon's growth has slowed, its impressive resource endowment suggests that it could develop dramatically into a highly attractive market if it is able to solve problems of economic motivation and organization.

A Ceylon Government "white paper" is reportedly being prepared which will set forth policy on private enterprise and foreign investment. Private businessmen indicate that until such a paper is published, and supported by legislation, they would make investment decisions with caution.

**El Salvador:** Coffee, as usual, dominates the economy this year but is not the expansive force it was in 1970 owing to lower export earnings. Growth in gross domestic product, 6.6 percent in 1970, has dropped to an estimated 4.5 percent this year. While all sectors have performed well, the big difference from the economic surge of 1970 is in coffee.

El Salvador's prospects for 1972 are roughly the same and for the same reasons. Manufacturing, exports to the Central American Common Market, commercial sales, agricultural production and public investment should all at least repeat the performance projected for 1971, but the drain of financing roughly one million bags of coffee stocks will reduce liquidity. However, if a large part of these stocks can be moved to market in 1972, the economy could grow at a rate close to 1970s pace.

**New Zealand:** A good market should continue for U.S. raw materials and capital equipment, especially modern labor-saving devices and industrial machinery. Timber working machinery and pollution control devices are examples of products with especially good potential. Because of the effect of the business slowdown on investment in new plant and equipment, however, imports from the United States are increasing less briskly than last year.

Steady diversification of New Zealand's economy is creating investment opportunities. Considerable investment is taking place in tourist hotels. Another promising field is processing of raw materials, such as timber and hides and skins.

**Spain:** Exchange rate changes and apparent beginnings of increased economic activity resulting from improved business confidence should benefit U.S. exporters. This comes none too soon since the U.S. share of the Spanish market has been gradually shrinking for a variety of reasons.

Further cause for optimism concerning future U.S. sales to Spain is justified by massive new investments planned by the giant state-owned industrial enterprise, INI, which should result in hundreds of millions of dollars in purchases from U.S. suppliers over the next few years.

**Honduras:** The government's investment program should continue to offer opportunities for U.S. exporters. Public investment has increased by 115 percent since 1968, while private investment has increased much more slowly. In 1968, public investment was 23 percent of total investment; in 1971 it is 37 percent. The leveling off in public investment growth this year is due to the fact that several large investment projects are at an end and new large projects are not scheduled to begin for a couple of years. The long-run trend, however, is for continued growth in public investment.

Honduras is a small but growing market for the United States. It should enjoy relative stability during the next few years. Development of basic economic infrastructure should attract new foreign investment.

## World Trade Actions

# Andean Group Spells Out Technology Import Policy

**Andean Group:** The Andean Pact Foreign Investment Code, which became effective on July 1, establishes new requirements for contracts governing the "importation" of patents, trademarks, technology and knowhow into Bolivia, Chile, Colombia, Ecuador, and Peru.

Basically, the Code requires that all such contracts be registered with designated local authorities in these countries. Contracts in effect prior to July 1 must be registered within six months of that date. The Code is silent as to sanctions or other consequences of failure to register. Contracts completed after July 1 must be filed with local authorities for examination and approval.

Approval by a local government will generally be contingent upon a finding that the transaction is beneficial to the country's development. Such decisions will be based on an assessment of probable profits, the price of the goods to be produced with the technology, and certain other economic factors. There are also a number of specific proscriptions in the code which preclude member countries from authorizing patent, trademark, technology and knowhow contracts containing certain types of clauses.

A contract may not contain provisions limiting the recipient's choice of sources for capital goods, semi-finished products, raw materials or other technology. It may not set prices of products manufactured under the licensed technology or covered by a licensed trademark, or restrict the volume or structure of production. Also prohibited are purchasing options in favor of the supplier, provisions requiring feed-back of inventions or improvements, royalty payments for unexploited technology or unused trademarks, and territorial restrictions on the sale or export of products bearing a licensed trademark. Choice-of-law clauses are forbidden, thereby reserving legal jurisdiction to the recipient country, as are those allowing subrogation by countries to the rights of their national investors.

In addition to these specific limitations on the freedom of the parties to negotiate contract provisions, the Code includes measures to increase the use of technology originated within the Andean subregion and to prevent royalty payments between related foreign and domestic companies or for readily available technology.

Copies in English of the Andean Pact Foreign Investment Code are available on loan from American Republics Division, Office of International Commercial Relations, BIC-886, U.S. Department of Commerce, Washington, D.C. 20230.

**Colombia:** This nation's regulations for the Andean Group foreign investment code make some exceptions to the Code's restrictive measures; at the same time, they are more restrictive than Colombia's previous foreign investment regulations. All foreign investment must be approved by the National Planning Department; previously only investments of over $100,000 required such approval. The 14% profit remittance limitation is retained, with exceptions. Foreign companies, those with over 49% foreign investment, have access only to short-term domestic credit. Contracts involving patents, trademarks, industrial procedures, commissions, and similar matters still require Royalties Review Committee approval.

Existing companies incorporated before July 1, 1971 must begin the process of converting into a national or a mixed enterprise, if they intend to market and profit from the tariff reductions available under the Andean Group common market. New companies, those incorporating after July 1, must agree to become mixed enterprises within a maximum period of 15 years. No new foreign investment will be allowed in public services, domestic transport, publicity, commercial radio, television, newspapers and magazines. No new investment is to be allowed in commercial and marketing organizations, except for tourism.

New foreign banks will not be authorized; existing foreign banks which agree to become mixed companies within ten years may increase their investment. There will be no new investment in insurance companies; existing companies may increase their investment only when 60% or more nationally owned. Foreign investment will be allowed in mining; the Ministry of Mines and Petroleum is instructed, whenever possible, to seek national participation and an equal voice in management.

Foreign petroleum exploration and exploitation activities will apparently continue under existing Colombian legislation. New investment in petroleum refining, transportation and distribution will be allowed only when linked to the National Petroleum Co., although existing companies may make such investments under certain conditions. New foreign investment in finance companies will be allowed only in exceptional cases. Foreign investment will be allowed in forestry on a case-by-case basis.

An English translation of Decree No. 2153 may be secured on a ten-day loan basis from the American Republics Division.

**Peru:** On Nov. 18 the state oil company (PETROPERU) signed an operating contract with British Petroleum (BP) for exploration and exploitation of slightly more

than one million hectares in the jungle region south of Iquitos.

The contract is for 30 years, with the first four years as an exploration period. BP will carry out the exploration at its own expense and risk; also, if commercial quantities of petroleum are discovered, BP will cover expenses of exploitation and receive 50% of production up to 100,000 barrels per day (bpd.), 51% of production over 100,000 and up to 200,000 bpd., and 52% of production over 200,000 bpd. The other half of production is to go to PETROPERU, which will meet local tax obligations of the private oil company. Similar contracts were signed with Occidental Petroleum and a Tenneco-Union joint enterprise in June and September, respectively.

Another recent development in Peruvian petroleum was the discovery of oil by PETROPERU in the Peruvian jungle region west of Iquitos. The well, the first exploration attempt by PETROPERU, is producing from one to three thousand bpd., according to Peruvian officials. They have stressed the need for foreign oil companies to invest in Peru, which has an increasing annual operating petroleum deficit of more than 35,000 bpd.

**Argentina:** import restrictions were relaxed as of Nov. 1. However, the suspension of imports of certain goods considered "not indispensable for national development" continues in effect through June 30, 1972. Imports for public account (national, provincial, municipal government agencies and enterprises, government concessionaires, public works contractors) are prohibited except on authorization by the Ministry of Commerce backed by recommendation of the Ministry of Industry and Mining. National government agency and enterprise procurement may be able to obtain relatively liberal authorizations to import.

"Indispensable" goods may be imported by private parties. However, with the exception of commercial samples, tourist purchases, and other minor items, a 15% surcharge is applicable, in general, to all imports subsequent to Oct. 31. This surcharge is intended as the main additional deterrent to imports by private parties. The surcharge applies to imports under special regimes including those to promote industrial development.

**Republic of Viet-Nam:** The Government has instituted a series of reforms to aid economic development and stablization, effective Nov. 16, including measures affecting exchange and tariff rates, and trade liberalization.

A three-tiered exchange system has been established with flexible rates to be adjusted in small steps commensurate with the rate of inflation. A rate of 275 piasters per U.S. dollar will be applied to U.S. AID and PL 480 imports; a rate of 400 per dollar will be applied to other imports; and a third rate, 410 per dollar, will be applied to all invisible transactions and exports.

Pending enactment of legislation authorizing the Government to change the official parity, the 118 rate continues to be the official parity but applies only to Vietnamese and foreign government transfers and student transfers.

All existing import tax schedules (including austerity taxes) have been abolished and replaced by a single tariff schedule of four rates: zero, 25 percent, 50 percent, and 200 percent, with most imports falling into the zero and 25 percent categories. The 200 percent rate applies to personal motor vehicles only. In addition, as required, a 25 percent tax may be applied to protect local industry. The tariff changes, although implemented immediately, will require legislative endorsement.

Licensing requirements will be abolished for all exports and for all imports except those financed by U.S. assistance. Most prohibitions on imports of specific commodities will be abolished over the next few months. However, the ban on importation of motor cars and motorbikes is expected to continue.

**Spain:** The Bank of Spain lowered its rediscount rate from 6% to 5% on Oct. 22. The last time the rate was changed was April 5 when it was lowered from 6.25%. Observers attribute this action to recent declines in interest rates elsewhere in Europe, and to the need to discourage inflows of "hot money." The necessity of stimulating the Spanish economy, which is lagging behind its recent rates of growth, is also cited.

**Uganda:** The Bank of Uganda has announced that foreign exchange will not be made available for "non-essential" imports until such time as the goods actually arrive in Uganda. This means that normal letter-of-credit financing, wherein payment may be made on the basis of documents received prior to arrival or shipment of the goods, is no longer allowable for "non-essential" goods. The new regulation does not apply to goods already in transit to Uganda. "Non-essential" imports comprise all goods not for use by the Government, in local manufacturing, agriculture, mining, public services, transport and construction.

For more information contact the Africa Division, BIC-884, U.S. Department of Commerce, Washington, D.C. 20230 (202-967-2436).

**Libya:** The Ministry of Unity and Foreign Affairs has announced the establishment of a Trade Dispute Mediation Office under the auspices of the Libyan Chamber of Commerce and Industry for the arbitration and settlement of all commercial complaints and disputes between Libyan and foreign firms. Complaints will be referred to this office for settlement by the Chamber of Commerce and Industry. Any problems which the new mediation office cannot handle will reportedly be left to the disputants to resolve in Libyan courts.

# International Business Reports

**Tariff Profiles in Latin America: Implications for Pricing Structures and Economic Integration. By Harry H. Bell. 188 pp. $13.50.**

Examines the structures of protection in individual Latin American countries and interprets commercial policy issues in light of attempts at regional economic integration. An analytical framework of tariffs and other protective structures is developed, and applied to such policy-oriented issues as specialization among and within industries, trade creation and diversification, location of industries under integration schemes, and the position of multinational corporations.

**Write:** Praeger Publishers, 111 Fourth Ave., New York, N.Y., 10003.

**The Foreign Trade of Mainland China. By Feng-hwa Mah. A publication of the Committee on the Economy of China of the Social Science Research Council. 270 pp. $9.75.**

This study of Communist China's foreign trade from 1950 to 1969, based on information from Chinese, Russian and Western sources, analyses topics such as China's foreign trade systems (organization, planning, and operation), price problems in China's foreign trade, and international settlement with Western and Communist countries. In addition, China's foreign trade (value, direction, commodity structure) and degree of foreign trade dependency are examined.

**Write:** Aldine-Atherton, Inc., 529 S. Wabash Ave., Chicago, Ill. 60605.

**Engineers' Overseas Handbook. Compiled by the Department of Commerce's Bureau of Domestic Commerce. 250 pp. $1.50.**

This is the U.S. engineering profession's comprehensive guide to doing business abroad. It lists engineering qualifications and terms on which U.S. engineers may practice in 114 countries around the world, giving country-by-country information on license requirements, local representation, local participation in engineering contracts and employment, contract negotiation and price bidding, taxation, convertibility of currency and repatriation of fees, language, exchange rates, and social costs to employers. Includes addresses and telephone numbers of U.S. Embassies and Consulates.

**Write:** Superintendent of Documents, U.S. Government Printing Office, Washington D.C., 20402.

**The Pulp and Paper Industry 1970-71 in the OECD Member Countries, $4; Labour Force Statistics 1958-69, $4.50; The Capital Market, International Capital Movements, Restrictions on Capital Operations in Switzerland, $2; National Accounts of OECD Countries 1953-69, $8.25; The Employment Problem in Less Developed Countries, $5; Aid Tying and Export of Nitrogenous Fertilizers from the Persian Gulf, $2; Developments and Problems of Seaborne Container Transport, $2.75; The Chemical Industry, 1969-70, $6.50; Maritime Transport, 1970, $3.50; Textile Industry in OECD Countries, 1969-70, $4.**

**Write:** OECD Publications Center, 1750 Pa. Ave. NW., Washington, D.C. 20006.

**Joint Venture Survival in Multinational Corporations. By Lawrence G. Franko. 236 pp. $17.50.**

This publication deals specifically with the survival probability of joint ventures involving U.S.-based firms. It attempts to explain and predict the timing of organizational and ownership change, using a model based on study of ownership change in joint ventures of 170 U.S. companies (1900-67). The implications of this model for planning corporate strategy, organization and ownership are explored. The author also discusses variables affecting survival.

**Write:** Praeger Publishers, 111 Fourth Ave., New York, N.Y., 10003.

**Thailand's Monetary Experience: The Economics of Stability. By Paul B. Trescott. 368 pp. $18.50.**

This analysis of the structure and functioning of the Thai monetary system focuses on the commercial banks and the Bank of Thailand. Evidence is given that a developing tropical agricultural economy can combine relatively stable prices and liberal trade and financial policies with a reasonably high rate of development. Included is an econometric model describing Thai monetary and income developments that is applicable to other emerging nations.

**Write:** Praeger Publishers, 111 Fourth Ave., New York, N.Y., 10003.

## Calendar For World Traders

**Dec. 16—New York** — Christmas meeting of the Foreign Credit Interchange Bureau's Chemical and Food Export Club, Advertising Club, noon.

**Dec. 16—Phoenix** — Export workshop, Commerce Field Office, 10 a.m.-noon.

**Dec. 21 — New York** — Luncheon meeting and election, Foreign Credit Interchange Bureau's Hardware, Automotive & Allied Trades Group, Advertising Club, noon.

**Jan. 6—Cleveland** — Monthly meeting of the Cleveland World Trade Assn., American Room, Mid-Day Club, 11:30 a.m.

# Worldwide Business Services

*International trade specialists in the Department of Commerce and Foreign Service Officers in the U.S. Embassies and Consulates around the world are continually developing specific commercial opportunities through which American companies can find buyers, agents, partners or investors overseas. One of the major means for communicating these opportunities promptly and accurately to the U.S. business community is through the columns of this magazine. The section that follows presents details about U.S.-sponsored overseas exhibits, licensing and joint venture proposals, opportunities to sell to foreign firms and government agencies, appoint agents, details on major construction and expansion projects, and notices of U.S. visits by foreign buyers.*

## U.S. Promotions Overseas

**GERMANY. Nuclear Instrumentation and Equipment.** Market research has identified a wide range of U.S. equipment having excellent sales potential in the Federal Republic of Germany. Instrumentation and equipment for high and low energy physics and for nuclear medicine applications, in-core instrumentation for reactors, and computerized instrumentation and measurement equipment are being sought by German buyers of nuclear equipment. By 1975, imports of U.S. nuclear-related equipment are expected to exceed $100 million yearly. Call Henry Weseloh, 202-967-2800. Frankfurt Trade Center, Feb. 21-24.

**SCANDINAVIA. Hotel & Restaurant Equipment.** In 1970 U.S. firms exported to the Nordic area institutional equipment and products valued at more than $30 million. Increased potential for sales of American goods in this area is being brought about by increased availability of capital; severe shortages of labor and its high cost, resulting in demand for labor-saving devices and systems; transformation from small family businesses to high volume accommodations and large-scale serving, made possible by industrial methods of food preparation and management; economies of standardization and mass purchasing by large chains; a trend toward more food consumption outside the home; and rising tourism. Call John R. Crown II, 202-967-4421. Stockholm Trade Center, Feb. 21-26.

**JAPAN. Advanced Medical Electronic Instruments & Equipment.** The Japanese medical electronics industry is at the "take off" stage of greatly expanding consumption. Japanese investment in medical electronics equipment for 1975 is estimated at $481 million. In 1969 Japanese imports of medical electronic equipment reached almost $2 million with nearly 50 percent from the United States. During recent years, import growth has averaged 40 percent. Over 700 hospitals are scheduled for construction between 1970 and 1975. Call Randall Miller, 202-967-4512. Tokyo Trade Center, Feb. 22-27.

**MEXICO. Metalworking Equipment and Controls.** Imports of automatic metalworking equipment increased from $6 million in 1967 to over $25 million in 1970. Rapid industrialization and consequent need for higher and better quality production will require increasing importation of this equipment, of which 60 percent is supplied by U.S. producers.

Mexican buyers of advanced metalworking equipment and controls and a select group of agents and distributors interested in establishing long-term business relationships with American firms will attend. Call Joe McNulty, 202-967-3350. Mexico City Trade Center, March 6-10.

**JAPAN. Pulp, Paper Manufacturing Equipment, Instruments and Supplies.** Supported by a rapidly increasing demand for pulp and paper, Japan has emerged as one of the world's foremost producers. It now ranks second after the United States in the production of paper and paperboard, producing 12.9 million tons in 1970, an increase of almost 15 percent since 1969. Similarly, Japan has increased its lead in pulp production, producing 8.8 million tons in 1970, to become third largest in the world. To keep pace with the increased demand, sizeable investments in Japanese pulp and paper production facilities are being planned, providing a ready market for U.S. equipment. Call William E. Dawson, 202-967-5286. Tokyo Trade Center, March 13-18.

**ITALY. Analytical Laboratory Apparatus Exhibition.** The Italian market for analytical laboratory apparatus continues to expand at 20 percent a year. The United States is the principal supplier. Call Sam Spaulding, 202-967-3968. Milan Trade Center, March 14-18.

**FRANCE. Minicomputers and Related Peripherals.** The use of minicomputers in France is growing rapidly. French business concerns are aware of their need for automatic data processing and are becoming ready customers for small computers. This offers an opportunity to show small-scale computers and peripherals to one of the fastest growing markets for computer equipment. Sales of EDP equipment are growing at a rate of 20 percent annually and are expected to reach $900 million by 1974. Contact Gus Duda, 202-967-2434. Paris Trade Center, March 20-24.

**GERMANY. Pollution Control Equipment and Instrumentation.** U.S. manufacturers can enlarge their share of the $1.3 billion German pollution control market by exhibiting air and water pollution sampling, measuring, analyzing, and control instrumentation, reverse osmosis systems, and "clean room" equipment. While Germany makes the most of its own pollution treatment equipment, both German industry and government enforcement agencies look to the United States for the best quality and most advanced technology, the most important factors in their purchasing decisions. Call Lee Swift, Jr. 202-967-4461. Frankfurt Trade Center, March 20-24.

**AUSTRALIA. Mini-Midi Computers & Software.** The dynamic Australian EDP market more than doubled in 1970 over 1969, from $36 million to $72 million. A growth rate of approximately 20 percent per year is projected for the 1972-74 period, during which U.S. manufacturers are expected to increase their current 50 percent share of the market, which is supplied almost entirely by imports. The current trend toward small computers is attributed to the nature of the Australian economy, which is comprised mainly of small to medium-sized businesses for which larger computers or time sharing operations are not often practical. Call John Klingelhut, 202-967-5751. Sydney Trade Center, April 17-21.

**FRANCE. Materials Test and Quality Control Equipment.** The French market for materials test and quality control equipment offers a substantial opportunity to U.S. suppliers since it is estimated that imports are equivalent to about 45 percent of French production. Estimates of imports were $22.5 million in 1970 and are expected to increase by $2 million annually through 1973. The Exhibition will feature electrical and electronic test and analyzing equipment as well as sophisticated mechanical equipment. Call Charles M. Whitley at 202-967-4961. Paris Trade Center, April 17-21.

**UNITED KINGDOM. Transducer Instrumentation Exhibition.** Growth in electronic monitoring and control has focussed British interest on latest U.S. developments in the transducer instrumentation field. A special survey has found prospects for a variety of American instrumentation equipment with applications in advanced industrial and research fields. Eugene F. Shaw, 202-967-3838. Call London Trade Center, April 17-21.

**SCANDINAVIA. Electronics Production and Test Equipment.** Scandinavian output of electronics products rose to an estimated $1 billion in 1970 with production forecast to increase rapidly. Investments in production and test equipment amounted to nearly $70 million, of which Sweden accounted for half. To meet projected output targets, Nordic firms plan to sharply increase their outlays for this equipment which is mainly imported from outside the four-country

area. Prospective buyers in Scandinavia are especially interested in microcircuit-semiconductor, printed circuit and numerically controlled production equipment and electronic test instruments. U.S. suppliers now have a major share of this growing market and stand to benefit substantially from greater promotional efforts. Call George Kemp, 202-967-3088. Stockholm Trade Center, April 17-22.

**YUGOSLAVIA AND EASTERN EUROPE. Air Conditioning, Commercial Refrigeration, Food Processing and Packaging Equipment.** Eastern Europe and Yugoslav enterprises are demonstrating an increasing awareness of the need for modern equipment that will help them compete in tourism and export markets. Awareness has now reached the demand stage for these kinds of equipment. Exhibiting manufacturers wishing to get in on the ground floor will be given special advantages. For further information about Food Processing and Packaging call Thomas N. Nisbet 202-967-4161. Information about the Air Conditioning and Commercial Refrigeration opportunities is available from Fred E. Crosley, Jr., 202-967-4162. Zagreb International Spring Fair, April 17-23.

**MEXICO. Industrial Process and Analytical Instrumentation.** The Mexican market for this type instrumentation will total about $40 million annually by the end of 1971. Imports are expected to account for $35 million of the country's needs with the U.S. share of the market estimated at $24 million. The Mexican Government encourages manufactured goods exports, and is urging industrialists to modernize production and quality control testing facilities; this has increased the demand for advanced instruments. This exhibition offers U.S. suppliers an excellent opportunity to introduce or expand sales in a growing market where new U.S. Trade Center facilities have recently been inaugurated. Call Jim Blow, 202-967-4565. Mexico City Trade Center, April 24-28.

**ITALY. Industrial and Commercial Security.** Economic expansion has created security problems which can be remedied by sophisticated systems and devices. The number of security-conscious businessmen has increased significantly, resulting in a good market for such equipment. Call Robert B. Wallace, 202-967-4508. Milan Trade Center, May 9-13.

**ARGENTINA. Quality Control and Reliability Equipment Exhibition-Seminar.** This is the inaugural event of the first U.S. Regional Trade Development Center to be established in South America. As Latin American industry continues to expand, increased emphasis is being placed on automation and quality control. The Argentine Government is fostering quality control and provides incentives for firms to purchase such equipment. The shortage of skilled labor assures a bright sales potential in the semi and fully automated equipment field. U.S. exports of quality control equipment to Argentina topped $4 million in 1970. Imports of sophisticated control, measuring, and testing equipment will grow considerably as limited local production is unable to supply the expanding industrial complex with equipment used in dimensional, non-destructive environment and optical testing. A seminar featuring the presentation of papers reflecting the latest in quality control technology is an added attraction to this exhibition. Call Franc Manzolillo, 202-967-3752. Buenos Aires Trade Center, May 15-19.

**FRANCE. Food Processing and Packaging Equipment.** Backed by a multi-national market promotion campaign sponsored by the Bureau of International Commerce, this show will be aimed at a blue-ribbon group of buyers, agents, and distributors in France, U.K., Germany, Sweden, Denmark, Belgium and the Netherlands. This combined market is expected to rise from $241.6 million in 1969 to 454.2 million in 1975. Products in highest demand in this seven-country group are: Food processing—canning and preserving machinery and equipment; meat processing machinery and equipment; convenience and snack-food-processing machinery and equipment; and bakery and dairy equipment. Packaging—casing and cartoning machinery and equipment; automatic palletizers and de-palletizers; automatic check weighing machinery; shrink wrapping machinery and equipment; form-fill and seal machinery and equipment; bagging, twisting and typing machinery and equipment; high-speed, high volume beverage bottling lines; and thermo-forming machinery and equipment. Call John Wolf, 202-967-4942. Paris Trade Center, May 15-19.

**GERMANY. Autoplast '72.** This show will feature controls, instrumentation, automated machines and systems for the plastic production industry. Newly developed machines, certain raw materials and specialty products in demand in Germany will also be included. By 1975, plastics production in the Federal Republic is expected to reach 6.6 to 8.8 million tons, an annual increase in output of 5 to 10 percent. Dramatic growth in plastics use is occurring in the building industry, in packaging, in the automobile industry and in plastic furniture. Call A. J. Beiring, 202-967-3713. Frankfurt Trade Center, May 15-19.

**UNITED KINGDOM. Materials Management Equipment.** British buyers are seeking new and more sophisticated equipment and systems to fill their materials handling needs. Rapidly rising labor costs, coupled with tax incentives for capital investments, are encouraging British buyers to look to the United States for many types of equipment. This exhibition will be held in conjunction with the International Mechanical Handling Exhibition (IMHEX). Call Don Schmadel, 202-967-4601. London Trade Center, May 15-19.

**JAPAN. Metal Surface Finishing and Treatment Equipment and Supplies Exhibition.** Targets of the pre-show promotion campaign in Japan will be marketing, administrative and engineer personnel of the Japanese automobile manufacturers and body makers, metal processors and platers, housewares and major appliance manufacturers, the electronic and electrical industries, and ship builders and paint applicator makers. Also considered will be individual exhibitor end user interests. Call Robert Levine 202-967-4705. Tokyo Trade Center, May 22-27.

**ITALY. Automotive Service Equipment, Supplies, and Auto Accessories.** Auto sales in Italy have experienced tremendous growth in the last decade, requiring corresponding growth in the automotive maintenance and repair facilities. Motor vehicle registration in Italy reached 11.2 million units in 1970, and in 1971, the Italian auto industry is expected to produce a record 2 million vehicles. Italian purchases of automobiles is forecast at 2.6 to 2.7 million cars a year by 1980. This show offers U.S. manufacturers an opportunity to exhibit all automotive-related equipment. Call Gus Duda, 202-967-2434. Paris Trade Center, May 23-27.

**MEXICO. Advanced Business Equipment.** American manufacturers are urged to bring and display their latest equipment to Mexico City, where they will find a ready market and benefit from concentrated sales exposure before a wide but select audience of key buyers. Mexican imports of business equipment are estimated at $41 million for the year 1971, and U.S. firms supply an estimated 50 percent of this total. An intensive pre-show market promotion campaign will be conducted by the new U.S. Trade Center to draw the maximum quality audience in this market, which is growing at 10 percent a year. Call Jim Blow, 202-967-4311. Mexico City Trade Center, June 5-9.

**SCANDINAVIA. Industrial Process Controls.** As a highly industrialized region, Scandinavia continues to undergo expansion and diversification of processing industries. Rising costs and labor shortage are forcing plants to automate in order to remain competitive. Manufacturers are consolidating facilities to achieve greater efficiency. Such factors are creating a growing demand for industrial process controls and related automation equipment. Investment in new equipment in 1971 is expected to reach $45 million in Sweden alone. About two-thirds of total Swedish process control consumption is imported. Call Lee Swift, 202-967-4461. Stockholm Trade Center, June 5-10.

**JAPAN. Computers, Peripheral Equipment and Software.** Japan is one of the best export markets for U.S. computers, peripheral equipment, parts and accessories for computing equipment. In 1970 exports from the United States to Japan exceeded $155,000,000. The trend in U.S. sales through the first four months of 1971 points to a further increase to at least $165,000,000. Dependence on imports of U.S. high technology computing equipment and parts is expected to continue for several years. The outlook for U.S. exports of software packages is also bright. Call Maurice Shea, 202-967-4511. Tokyo Computer '72, June 8-13.

**FRANCE. Apparel Manufacturing Equipment.** Sales by the French apparel industry have increased spectacularly. A main factor in these sales advances is the new attention given by French apparel manufacturers and big-name couturiers to the creation and marketing of modish but moderately priced ready-to-wear clothing for men and women. Gross sales of the French ready-to-wear manufacturers were estimated at $1.5 billion in 1969. If the French are to keep their international reputation as fashion leaders in the era of mass production, they must continually purchase new machinery and adopt sophisticated production techniques. This exhibition will feature equipment with high sales potential in France as indicated by recent market research: machines for all cloth operations (spreading, folding, winding, measuring, examining, cutting), advanced sewing machine accessories (buttonhole making, button sewing, collar shaping and cutting), belt and tab turners, permanent press equipment, laminating

*Sales opportunities in five U.S. commercial exhibitions, trade fairs and solo exhibitions and 25 shows at the nine U.S. Trade Centers are being offered to present and potential U.S. exporters between now and November 1972.*

*Each Trade Center exhibition is limited to one particular line of products and centers are located in Bangkok, London, Milan, Mexico City, Frankfurt, Stockholm, Sydney, Tokyo and Paris. For further information on the Trade Center shows described or for more facts on U.S. exhibitions,* **write:** *Commercial Exhibits Program, BIC-932, U.S. Department of Commerce, Washington, D.C. 20230.*

*Trade missions are groups of U.S. businessmen organized to travel abroad promoting the export of U.S. goods and services made by their particular industry.* **Write:** *Trade Missions Div., BIC-926, U.S. Department of Commerce, Washington, D.C. 20230.*

and automatic pressing equipment. Call Don Johnson, 202-967-2795. Paris Trade Center, June 12-16.

**GERMANY. Passive and Electromechanical Electronic Components.** Manufacturers of passive components in the largest and fastest growing electronics market in Europe expect average annual growth rates of 8 to 10 percent over the next three years. Modernization and expansion of the telephone system, the development of the Bundespost data transmission network, continuing industrial automation, increasing investment in R and D, intensified legal enforcement of pollution control and traffic regulations and the increasing share of electronics in consumer goods are expected to insure an expanding market for electronic components. Call Jack Crown, 202-967-4421. Frankfurt Trade Center, June 12-16.

**ITALY. Assembly Engineering Equipment Exhibition.** In 1970 Italian industry purchased $200 million worth of assembly equipment, fasteners, adhesives, and related products and equipment. Italian firms are increasingly attempting to find the latest products and equipment which will enable them to reduce both the time and labor required for assembly processes. Because Italian wage rates are the highest in history, manufacturers are seeking to remain competitive by reducing costs of production. U.S. manufacturers will have an opportunity to display the following products: adhesives, pressure sensitive tapes, hot melt adhesive applications, stapling machines, wire stitching machines, automatic wire wrapping equipment (electronic assembly), assembly machines, special fasteners, stud welding systems, ultrasonic welders, torque/tension analyzers and testers, and all other similar and assembly-related equipment. Call Sam Spaulding, 202-967-3968. Milan Trade Center, June 20-24.

**ITALY. Plastics & Plastic Processing Equipment.** Italy, the second largest plastic producer in Europe and one of the world's fastest growing consumers of plastics, is hosting the world's second largest plastic exhibition, PLAST '72. This international fair is a key vehicle for entrance into the entire European plastics markets. Italian consumption of plastics has been growing at an average annual rate of 20 percent for the last five years and is expected to continue. Research has confirmed good sales potential for specialty plastics, modern, automated plastic processing machinery, and selected semifinished and finished plastic products. Call Robert Wallace, 202-967-4508. U.S. Commercial Exhibition, PLAST '72. Milan, Oct. 8-15.

**ARGENTINA. The First International Exhibition for Construction, Industry and Business Seminar.** This first full-scale Commercial U.S. Government-Industry Exhibition in the River Plate area will be the showcase for state-of-the-art developments in U.S. instrumentation, business equipment, construction, machine tools, and printing and graphic arts. Top executives from Argentine industry, government and military will be the target audience for this solo exhibition which will be enhanced by a special seminar featuring the presentation of papers reflecting the latest in technology and ideas in the field of U.S. instrumentation, business equipment, machine tools, construction, and printing and graphic arts. Call Franc Manzolillo, 202-967-3752. U.S. Solo Exhibition, CIBEX-USA 1972, Buenos Aires Municipal Center, Oct. 23-28.

**TAIWAN. Exhibition of Equipment for Business and Industry.** This will be the third exhibition of its type to be held in Taiwan. At the Exhibition held in Taipei from Nov. 30-Dec. 5, 1970, 50 U.S. manufacturers sold $516,515 worth of equipment during the show and forecast over $12 million in sales within two years from sales contacts made at the exhibition. The United States is Taiwan's second largest supplier, with a 34.4 percent share of the market in 1970. The following U.S. equipment is believed to have the best market potential in Taiwan in 1972: testing, measuring, quality control and scientific instruments; construction materials handling equipment; metalworking equipment and machine tools; power and hand tools; electronic production and test equipment; office machinery and computing equipment; air conditioning and refrigeration equipment; and pumps, valves and compressors. Call J. David Anderson, 202-967-4858. Taipei '72 U.S. Solo Exhibition, November.

## Space Fully Booked

The following exhibitions and trade missions in which all exhibit space has been reserved are still open for visits by interested industry representatives. U.S. firms with sales representatives in these market areas may wish to ask them to investigate the shows.

Metals Processing Equipment, Stockholm Trade Center, Jan. 24-29; Computer Graphics & Computer Aided Design, London Trade Center, Jan. 31-Feb. 4; Data Communications Equipment, Milan Trade Center, Feb. 22-26; High Fidelity and Stereophonic Equipment, London Trade Center, March 20-24; and Building Products and Construction Equipment, Scandinavia Trade Center, March 20-25.

# World Bank, IDA-Financed Project List Updated To Assist U.S. Firms

The International Bank for Redevelopment and Construction (World Bank) and the International Development Association (IDA) are reviewing a number of major projects for developing nations for possible financing.

These projects are either new or have been revised significantly since being listed in the Aug. 9 issue of *Commerce Today*, and the Aug. 18 issue of *Commerce Business Daily*. This listing, compiled by the Business Opportunities Staff of the Office of Business Services, should be of interest to U.S. concerns in the fields of consulting service, engineering and equipment and machinery suppliers.

Each entry includes: the country receiving the proposed loan and, where appropriate, the agency charged with completing the project; the amount in millions of dollars, and source of the loan; the project being financed; the stage of processing; and any procurement information that can be obtained by the Business Opportunities Staff.

### EASTERN AFRICA

SUDAN: An appraisal mission is in the field to review the **highway maintenance project**; the amount of IDA loan has not been determined.

TANZANIA: Amount of IDA loan to be determined; **rural development;** preparation of project, which will be based on cotton, being completed by Government with PMEA assistance.

ZAMBIA: United Nations Food and Agriculture Organization (FAO) identification mission is preparing a report on the *Education III Project;* the proposed World Bank loan is $10 million.

### WESTERN AFRICA

CENTRAL AFRICAN REPUBLIC: Amount of IDA loan for **cotton development** to be determined; Government's comments on findings of preparation mission being reviewed.

CENTRAL AFRICAN REPUBLIC: **Banqui - Bossembele Road Project;**

Amount of IDA loan to be determined; feasibility study under way.

CHAD: Amount of IDA loan for **cotton development project** to be determined; discussions on report of EEC Fund for Economic Development preparation mission under way (possible joint financing).

CHAD: **Chari Bridge**; Amount of IDA loan to be determined; awaiting completion of feasibility study and detailed engineering.

IVORY COAST: Amount of World Bank loan for **rubber development** in Sodhevea to be determined. Government completing organizational arrangements. Appraisal mission was scheduled for October.

IVORY COAST: Detailed engineering underway for **road construction and maintenance**. Amount of World Bank loan is to be determined.

LIBERIA: An appraisal report is being prepared for the **agricultural development (rubber) project** the amount of IDA loan is to be determined.

NIGERIA: $20 million (World Bank): **Roads VI Project:** Project preparation mission planned for December.

SENEGAL: Appraisal report under preparation for the **Railway II Project**. World Bank loan to be determined.

SENEGAL: World Bank loan to be determined for the **Airport Project**; appraisal mission was scheduled for November.

SENEGAL: Awaiting selection by consultants of road sections to be improved for the implementation of a **highway maintenance project**. IDA had not determined the amount of the loan.

SENEGAL: IDA loan to be determined for the **Delta Rice Development Project**; awaiting completion of feasibility study.

### EAST ASIA AND PACIFIC

AUSTRALIA (PAPUA AND NEW GUINEA electricity supply commission); Project preparations are under way for the **Power II Project**. The amount of World Bank financing has not been determined.

AUSTRALIA (PAPUA AND NEW GUINEA): Pre-appraisal mission in field concerning the **Highways II Project**. The amount of loan to be determined, it is uncertain who the tenderer will be.

CHINA (Taiwan Railway Administration): $20 million (World Bank): **Railways V Project**. Railway electrification study being reviewed by bank and Government.

CHINA (Taiwan Power Company): Appraisal for the **Power IV Project** is planned for the first quarter of 1972; $25 million World Bank loan. Option for purchase of equipment being requested from suppliers bidding on equipment for third power loan (CHN-749).

FIJI: $3.5 million (World Bank); **Telecommunication Project**. Appraisal mission planned for December; bids invited for microwave equipment.

INDONESIA: **Highways III Project** is under preparation by consultants. Pre-appraisal mission is in the field. Amount of IDA loan has not been determined.

INDONESIA (State Owned Electricity Corporation (PLN): **Electricity Distribution II Project**; feasibility report being reviewed. Appraisal mission was scheduled for November. Amount of IDA loan to be determined.

MALAYSIA: Kuala Lumper **Water Supply II Project** preparation under way. Amount of World Bank loan to be determined.

### SOUTH ASIA

INDIA (State of Kerala): A $15 million IDA loan is being negotiated for the **Pamba Irrigation Project**; an appraisal mission is tentatively scheduled for January.

NEPAL (Nepal Timber Corporation): Negotiations are under way for a $2.5 million IDA loan for the construction of a **plywood factory**; appraisal was tentatively scheduled for November.

NEPAL (Nepal Telecommunications Board (NTB)): Amount of IDA loan has not been determined for the **Telecommunication II Project**, pending NTB's new development plan.

### EUROPE, MIDDLE EAST, NORTH AFRICA

FINLAND: Awaiting submission of definite proposal for a **forestry project** from the Government; $20 million World Bank loan.

GREECE: Amount of World Bank loan for the **Education II Project** has not been determined. Appraisal mission is in the field.

ISRAEL: The amount of the World Bank loan for a **sewerage project** has not been determined pending the completion of feasibility studies.

JORDAN: Preappraisal mission was planned for October to study the **Water Supply and Sewerage Project**; $5 million IDA loan.

LEBANON: UNESCO Project preparation mission for the **Education Project** was scheduled for late October. Amount of World Bank loan to be determined.

MOROCCO: Awaiting the feasibility study for the **Oumer R'bia multipurpose** project. The amount and source of the loan has not yet been determined.

MOROCCO: Project preparation underway for **Highway II**; the amount and source of loan has not yet been determined.

MOROCCO: $27.5 million World Bank loan for an **industry phosphate project** is being negotiated; prequalification notice for construction on a turnkey basis was published at the end of July.

TUNISIA (Societe Tunisienne De L'Electricite Et Du Eaz): Appraisal mission in the field to study the **power generation and transmission project**; amount of World Bank loan to be determined.

YEMEN ARAB REPUBLIC: The feasibility study for the **Wadi Zabid Irrigation Project** is nearing completion; project preparation mission was scheduled for October. Amount of IDA loan to be determined.

### CENTRAL AMERICA, CARIBBEAN

COSTA RICA: A feasibility study for the **Power V Project** is under preparation; the amount of the World Bank loan has not yet been determined.

DOMINICAN REPUBLIC (Banco Central): Arrangements are being made for a feasibility study on **tourism** in the Puerto Plata area; amount of IDA loan to be determined.

EL SALVADOR: A detailed engineering study of **access roads in Northern Region** is under way. $2 million World Bank loan.

JAMAICA: $6.5 million World Bank loan for **Highway Maintenance Project**; request to UNDP for financing of project preparation being prepared.

PANAMA: Feasibility studies are under preparation for **fishing port project**; the World Bank has not yet decided the amount of the loan.

TRINIDAD AND TOBAGO: Negotiations are under way for an $8 million World Bank loan for an **Education II Project**; UNESCO project preparation mission was scheduled for mid-November.

VENEZUELA: The scope of the **maiquetia airport** project is being revised; the World Bank has not yet determined the amount of the loan.

VENEZUELA: The amount of the World Bank loan is to be determined for the **Power V Project**. An identification mission was planned for late 1971.

### SOUTH AMERICA

BRAZIL (Rede Ferrouiaria Federal, S. A.): Additional project preparation mission planned for January to study the **Second Stage of Railways project**; amount of World Bank loan to be determined.

BRAZIL: The amount of the World Bank loan for the **Second Stage of Education Project** is dependent on the Government findings upon completion of a survey of educational systems of two Northeastern states (scheduled for completion by mid-1972).

BRAZIL (Light-Servicos De Electricidade, S. A.): Awaiting **Power Distribution Project** preparation; amount of World Bank loan to be determined.

COLOMBIA: Awaiting receipt of **Cerro Matoso Nickel Project** proposal from the Government; size of World Bank loan has not yet been determined.

COLOMBIA: The amount of the World Bank loan for the **Interconnection Hydropower Project** has not been determined, pending the outcome of the feasibility studies.

PERU (National Port Authority): Various studies leading to **ports project** identification are planned; amount of World Bank loan to be determined.

PERU: $20 million World Bank loan has been decided on for the **Highways VI Project**; project preparation mission was tentatively scheduled for November.

URUGUAY (Administracion General de Las Usinas Electricas y los Telefonos del Estado (UTE)): The World Bank has not decided what size loan will be made for the **power project**, pending the outcome of UTE's planning study.

## Details On UNDP Projects Available

The Trade Opportunities Staff of the Office of Business Services has received a listing of special United Nations Development Program (Special Fund) project reports that may interest U.S. firms. Firms or consultants may obtain copies of the reports directly from the concerned organization, whose address is listed following each project.

NOTE: University Microfilm's pricing structure is: Positive 35mm microfilm—

1.3¢ per page; 4 x 6 microfiche (60 page)—1.3¢ per page; xerographic hard copy—5¢ per page; minimum charge for any item by any method—$4.

BRAZIL: **Power study of South Brazil,** prepared by Canambra Engineering Consultants Ltd., Nassau, Oct. 1968 to Nov. 1969. (Summary, report, and 20 appendices; 13 books). Executing agency: International Bank for Reconstruction and Development (IBRD). Available from University Microfilms, 300 N. Zeeb Rd., Ann Arbor, Mich. 48106.

CHINA (TAIWAN): **Sewerage planning in the greater Taipei area.** (WHO/UNDP/SF/CHA 27). Final report prepared by Camp Dresser & Mckee International Inc., Boston, Mass., 1970. Executing agency: World Health Organization (WHO). Available from: World Health Organization Co-operative Programmes for Development, 20 Ave. Apia, Geneva.

COLOMBIA: **National Instructor Training Centre and National Vocational Training Service (SENA) (COL-1/11).** Combined final report—*Formacion Professional en Colombia.* Ginebra, 1970. Executing agency: International Labor Organization (ILO). Available from: Public Information Branch, ILO, 154 rue de Lausanne, Geneva.

COLOMBIA: **Pre-Investment Study on forestry development in the Magdalena and Sinu River Valleys (FO:SF/COL 14).** Informe Tecnico 4—*Colombia: Inventario, forestal.* Rome, 1970. Spanish only. Executing agency: Food and Agriculture Organization of the United Nations (FAO). Available from: Distribution and Sales Sec., FAO, via delle Terme di Caracalla, Rome.

COLOMBIA: **Pre-investment study on forestry development in the Magdalena and Sinu River Valleys (FO: SF/COL 14).** Informe Tecnico 5. *Planificacion de corte y transporte de Madera en el area de la serrania de San Lucas: Observaciones sobre la industria del a serrio en Colombia.* Rome 1970. Spanish only. Executing agency: Food and Agriculture Organization of the United Nations. Available from: Dist. and Sales Sec., FAO, via del Terme di Caracalla, Rome.

COLOMBIA: **Pre-investment study on forestry development in the Magdalena and Sinu River Valleys (FO: SF/COL 14).** Informe Tecnico 10—*Colombia: Silvicultura y de bosques tropicales.* Rome, 1970. Spanish only. Executing agency: FAO. Available from: Distribution and Sales Sec., FAO, via delle Terme di Caracalla, Rome, Italy.

CYPRUS: **Survey of groundwater and mineral resources (CYP-2).** Technical Report. New York, 1970. (DP/SF/UN/50). Executing agency: United Nations. University Microfilms, 300 N. Zeeb Rd., Ann Arbor, Mich. 48106.

DAHOMEY: **Land transport-survey (DAH-5).** Subcontractor's final report prepared by N.D. Lea & Assocs. and Lamaire Valois International Ltd. (Toronto). September 1970. (English-French). Executing agency: International Bank for Reconstruction and Development. Available from University Microfilms. 300 N. Zeeb Rd., Ann Arbor, Mich. 48106.

GHANA: **Food Research and Development Unit (PL/SF/GHA-7).** Technical Report No. 1—*Accra: Crop Storage.* Rome, 1969. Executing agency: FAO. Available from: Dist. and Sales Sec., FAO, via del Terme di Caracalla, Rome.

GHANA: **Food Research and Development Unit (AGS: SF/GHA-7)** Technical Report No. 2—*Ghana: Food Processing and engineering problems.* Rome, 1970. Executing agency: FAO. Available from: Distribution and Sales Sec., FAO, via delle Terme di Caracalla, Rome.

ICELAND: **Survey of hydroelectric power development in the Huita and Thjorsa River Basins (ICE-1).** New York, 1969. DP/SF/UN/8-Iceland). Executing agency: United Nations. Available from: University Microfilms. 300 N. Zeeb Rd., Ann Arbor, Mich. 48106.

INDIA: **Pre-investment survey of forest resources (FO: SF/IND 23).** Technical Report No. 1—*Forest resources survey.* Rome, 1970. Executing agency: FAO. Available from: Distribution and Sales Sec., FAO, via della Terme di Caracalla, Rome.

INDIA: **Pre-investment survey of forest resources (FO: SF/IND 23).** Technical Report No. 2—*Yields and costs of industrial wood and bamboo.* Rome, 1970. Executing agency: Food and Agriculture Organization of the United Nations. Available from: Dist. and Sales Sec., FAO, via del Terme di Caracalla, Rome.

IRAN: **Integrated planning of irrigated agriculture in the Varamin and Garmsar Plains (AGL: SF/IRA 12).** Technical Report No. 6—*Agriculture* Rome, 1970. Executing agency: FAO. Available from: Dist. and Sales Sec., FAO, via del Terme di Caracalla, Rome.

IRAN: **Integrated planning of irrigated agriculture in the Varamin and Garmsar Plains. (AGL: SF/IRA 12).** Technical Report No. 7—*Farm Management.* Rome, 1970. Executing agency: FAO. Available from: Distribution and Sales Sec., FAO, Via delle Terme di Caracalla, Rome.

IRAN: **Same project (AGL: SF/IRA 12).** Technical Report No. 8—*Rural institutions.* Rome, 1970. Executing agency: Food and Agriculture Organization of the U.N. Available from: Distribution and Sales Sect., FAO, Via delle Terme di Caracalla, Rome.

ISRAEL: **Underground water storage study (FAO/SF: 39/15R9).** Rome, 1969. Executing agency: FAO. Available from: Distribution and Sales Sec., FAO, via delle Terme di Caracalla, Rome.

JORDAN: **Investigation of the sandstone aquifers of East Jordan (LA: SF/JOR 9).** Technical Report No. 1—*The Hydrogeology of the Southern desert of Jordan.* Rome, 1969. Executing agency: Food and Agriculture Organization of the United Nations. Available from: Distribution and Sales Sec., FAO, Via delle Terme di Caracalla, Rome.

KENYA: **Range Management Division of the Ministry of Agriculture and Animal Husbandry (AGP: SF/KEN 11).** Technical Report No. 1—*Range Management Division of the Ministry of Agriculture and Animal Husbandry; Bush Control.* Rome, 1970. Executing agency: FAO. Available from: Dist. and Sales Sec., FAO, via del Terme di Caracalla, Rome.

MADAGASCAR: **Survey and development of selected forest areas (MAG-8).** Report technique No. 3—*Formation de bucherons a la scie Mecanique.* Rome, 1969. French only. (FO: SF/MAG/194). Executing agency: FAO. Available from: Dist. and Sales Sec., FAO, Via delle Terme di Caracalla, Rome.

MADAGASCAR: **National Vocational Training Program (MAG-22).** Report technique No. 1—*Evaluation des besoins de formation professionnelle et moyens de formation a mettre en deuvre,* Geneva, October 1970. French only. Executing agency: International Labor Organization (ILO). Available from: Public Information Branch, ILO, 154 rue de Lausanne, Geneva.

MAURITIUS: **National system of vocational and technical education (MAR-3).** Technical Report No. 1—*The development of apprenticeship.* Geneva, May 1970. Executing agency: International Labor Organization (ILO). Available from: Public Information Branch, ILO, 154 rue de Lausanne, Geneva, Switzerland.

MEXICO: **Integrated agriculture program for education, research and extension work, Chapingo (ESR: SF/MEX 6).** Informe Tecnico 1—*El Reconocimiento de los Suelos en la Peninsula de Yucatan.* Rome, 1970. Spanish only. Executing agency: Food and Agriculture Organization of the United Nations. Available from: Distribution and Sales Sec., FAO, Via delle Terme di Caracalla, Rome.

PHILIPPINES: **Demonstration and Training in Forest, Forest Range and Water Shed Management (FOR: SF/PHI 16).** Technical Report No. 1—*Forestry economics.* Rome, 1970. Executing agency: FAO. Available from: Distribution and Sales Sec., FAO, Via delle Terme di Caracalla, Rome.

PHILIPPINES: **Demonstration and training in forest, forest range and watershed management (FO: SF/PHI 16).** Technical Report No. 2—*Reforestation.* Rome, 1970. Executing agency: Food and Agriculture Organization of the United Nations. Available from: Distribution and Sales Sect., FAO, Via delle Terme di Caracalla, Rome.

PHILIPPINES: **National industrial vocational training program (PHI-33).** Technical Report No. 1—*Evaluation of and recommendations on the national manpower and Youth Council and central technical services (the Secretariat).* Geneva, November 1970. Executing agency: International Labor Organization of the United Nations (ILO). Available from: Public Information Branch, ILO, 154 rue de Lausanne, Geneva.

REGIONAL: **Faculty of Engineering, University College of the West Indies** St. Augustine, Trinidad. (FR/UNESCO/UNDP/SF/REG 26). Final Report, Geneva, 1969. Executing agency: United Nations Educational, Scientific and Cultural Organization (UNESCO). Available from: The Director, Bureau of Documents and Publications, UNESCO, Place de Fontenoy, Paris 7.

RWANDA: **Highway organization and maintenance study (RWA/IFS 1)**—*Preliminary review of the Ruhengeri-Cyanika Road,* prepared by Electroconsult, Milan, March 1971. (English and French). *Feasibility study for the Ruhengeri-Gisenyi Road,* prepared by Electroconsult, Milan, March 1971. *Proposal for highway improvement and maintenance Program,* prepared by Electroconsult, Milan, October 1970. (English and French). Executing agency: International Bank for Reconstruction and Development. Available from: University Microfilm, 300 N. Zeeb Rd., Ann Arbor, Mich. 48106

SENEGAL: **Institute of Food Technology, Dakar** (AGS: SF/SEN 5). Rapport technique 2—*Etude sur la qualite bacteriologique des boissons gazeuses produites au Senegal.* Rome, 1971. French only. Executing agency: Food and Agriculture Organization of the United Nations. Available from: Distribution and Sales Sect., FAO, Via delle Terme di Caracalla, Rome.

SENEGAL: **Institute of Food Technology, Dakar** (AGS: SF/SEN 5). Rapport technique 3—*La Legislation et le controle alimentaira au Senegal.* Rome 1970. French only. Executing agency: Food and Agriculture Organization of the United Nations. Available from: Distribution and Sales Sect., FAO, Via delle Terme di Caracala, Rome.

SOMALIA: **Fishery survey** (FI: SF/SOM 13). Technical Report No. 1—*The tuna fishery of the Gulf of Aden.* Rome, 1970. Executing agency: Food and Agriculture Organization of the United Nations. Available from: Distribution and Sales Sect., FAO, Via delle Terme di Caracalla, Rome.

THAILAND: **National Service for Technical Skill Promotion and Job-Entry Training for Industry** (THA-29). Technical Report No. 1—*The establishment and initial operation of the national service and its national office.* Geneva, December 1970. Executing agency: International Labor Organization (ILO). Available from: Public Information Branch, ILO, 154 rue de Lausanne, Geneva.

TOGO: **Studies for the agricultural development of the Kara Region** (TOG-8). *Etude en vue du development Agricole de la Kara.* Rome, 1969-70. (Final Report plus five technical reports). French only. Executing agency: Food and Agriculture Organization of the United Nations. Available from: Distribution and Sales Sect., FAO, Via delle Terme di Caracalla, Rome.

TUNISIA: **Research and training on irrigation with saline water** Tech. Rpt. 1 (UNESCO/UNDP (SF) TUN 5). *Technical Report,* Paris, August 1970. English and French. Executing agency: United Nations Educational, Scientific and Cultural Organization. Available from: Director, Bureau of Documents and Publications, UNESCO, Place de Fontenoy, Paris 7.

UPPER VOLTA: **Agricultural Training and Demonstration Centre, Bobo Dioulasso** (FAO/SF: 63/UPV 1). Final Report—*Agricultural Training and Demonstration Centre, Matourkou.* Rome, 1969. French and English. Executing agency: FAO. Available from: Distribution and Sales Sect., via delle Terme di Caracalla, Rome.

ZAMBIA: **Forest industries feasibility study** (FOI:SF/ZAM 5). Technical Report No. 1—*Plantations in Zambia, with particular reference to eucalyptus.* Rome, 1970. Executing agency: FAO. Available from: Distribution and Sales Sect., via delle Terme di Caracalla, Rome.

ZAMBIA: **Forest industries feasibility study** (FOI:SF/ZAM 5). Technical Report No. 2—*Wood preservation treatments for plantation grown timber in Zambia.* Rome, 1970. Executing agency: Food and Agriculture Organization of the United Nations. Available from: Distribution and Sales Sect., FAO, Via delle Terme di Caracalla, Rome.

# Licensing, Investment Abroad

*Licensing and investment proposals from foreign firms are listed in these columns. Specific product interests in each proposal are highlighted in bold type to facilitate identification and each proposal is preceded by the appropriate four-digit product number taken from the Standard Industrial Classification (SIC) Manual.*

*Background information on opportunities abroad and assistance on overseas investments are available from the Office of International Investment, BIC-878, U.S. Department of Commerce, Washington, D.C. 20230. "P" numbers should be used when responding to specific proposals.*

*WTD indicates that a World Trade Directory Report containing financial and background information on the foreign firm is available for $2 from the Department of Commerce, BIC-924, Washington, D.C. 20230, or from any Commerce Field Office.*

**3079—MALAGASY REPUBLIC** — Joint venture to expand manufacture of **plastic products,** develop export markets. Seeks technical, marketing and administrative assistance; offers equity participation. Firm makes PVC pipes, polyethylene film and tubing, polyester products and polystyrene foam materials. Annual production of 700 tons. Has recently purchased site for expansion just outside of Tananarive. Write (preferably in French): Compagnie Malgache de Produits Metallurgiques et Plastiques (COMEPLAST), 17 rue Sergent Dewost, P.O. Box 1241, Tananarive, Malagasy Rep., Attention: Mr. Louis Rene Marc, Managing Director. Further details available from the Office of International Investment, BIC-878, U.S. Department of Commerce, Washington, D.C. 20230. WTD. P-71679

**3423, 3550—JAPAN**—Licenses or joint venture to manufacture **machinery or equipment for the garment, bedding, shoe, leather and automotive industries.** Also interested in production of portable tools. Will consider agency agreements. Presently makes industrial sewing machines parts; imports and distributes equipment for textile and clothing industries. Located in Osaka, company maintains offices in major Japanese cities. For further details write firm's U.S. representative, Mr. Keiji Iwai, Matsushita Industrial Co., Ltd., 137 Ruth Ellen Drive, Richmond Heights, Ohio 44143. WTD. P-71681

**3433—ITALY**—Manufacturing rights for **gas burners and boilers** having a potential heating capacity of 150,000 BTU's. Firm believes favorable marketing opportunities exist in Italy and Europe for these products. Presently the company makes oil burners, boilers and warm air heaters. It enjoys an excellent reputation. Tecnolamiera S.N.C., 17-19 Via I Maggio, I 41027 Quarto Inferiore (Bologna), Italy. WTD. P-71670

**3530, 3540 — ENGLAND** — Licenses to manufacture **earthmoving equipment, mechanical handling equipment, large machine tools and trailers.** Also interested in sales and service of these products in Europe. The company presently makes mechanical handling equipment, machine tool parts and fabricated vessels. Established in 1889, the firm employs 70. Mr. B. H. Dalkin, Sales Engnr., The Wingham Engineering Co. Ltd., Wingham, Canterbury, Kent., England. WTD. P-71675

**3530, 3560—GERMANY** — Well-established manufacture of **construction and mining tools, conveyers and compressed air motors** is seeking licenses from U.S. firms having new products in these fields. Especially interested in cleaning apparatus for bulk handling conveyor equipment. Company established in 1885, currently employing 1,700. Annual sales of DM 60 million. Froehlich & Kluepfel, Maschinenfabrik und Untertagebau, 28 Fuchsstr., 56 Wuppertal-Barmen, Germany. WTD. P-71677

**3537—JAPAN**—License to manufacture heavy-duty **industrial robots or mechanical arms** used in materials handling. Loading capacity of 5-30 kg. Firm is leading manufacturer of automobile parts and accessories; an affiliate produces industrial robots. Mr. Akira Sakamoto, Managing Director, Pitot Engineering Co., c/o Liaison Dept., Ichikoh Industries, Ltd., 10-18 Higashi Gotanda 5-chome, Shinagawa-ku, Tokyo, Japan, WTD. P-71669

**3550, 3569—ENGLAND**—Manufacturing rights for small to medium-sized **packaging, printing or paper converting machinery.** Firm currently produces tape dispensers, flexographic printing presses and labeling machinery. Employs around 150. Mr. M. R. Pengelly, Director, Samuel Jones & Co., Ltd., Butterfly Works, Dartford Industrial Trading Estate, Dartford, Kent., England. Product brochure describing the firm's present line are available from the Office of International Investment, BIC-878, Washington, D.C. 20230. WTD. P-71674

**3569 — NETHERLANDS** — Licenses to manufacture **air pollution control equipment** for the chemical and petrochemical industries. Firm currently produces automatic bottle and glassmaking machinery; also gas and air recovery and purification equipment. Mr. C. E. Philippi, General Manager, ROSARIO N. V., 88 Hoge Ham, Dongen, The Netherlands. WTD. P-71673

**3569 — NETHERLANDS** — Licenses to manufacture **apparatus, valves and controls for water treatment through ion exchange.** Interests include water softeners, demineralizers, decarbonizers and filters. Firm specializes in production of water pollution control equipment; is

subsidiary of large Dutch company. Mr. J. B. Lubbers, Assistant Manager, FIGEE-Vlaardingen N.V., 15 Kon. Wilhelminahaven Z.O.Z., or P.O. Box 90, Vlaardingen, The Netherlands. WTD. P-71676

3589—FRANCE—Manufacturing rights for **water treatment equipment including filtration softeners and purification systems.** Also interested in the production of **equipment for purification of air and gases.** Firm currently markets industrial water softeners, filters and compounds under subcontracting arrangements. Represents U.S. firms. Mr. Antoine Derreaumaux, President and General Manager, CIFEC (Compagnie Industrielle de Filtration et d'Equipements Chimiques), 18 rue d'Armenonville, 92-Neuilly, France. WTD. P-71672

3679—CZECHOSLOVAKIA — Manufacturing licenses, technical know-how and specialized equipment to manufacture **magnetic recording tape** sought by Prague organization. For details write Office of International Investment, BIC-878, U.S. Department of Commerce, Washington, D.C. 20230. P-71682

3964—FRANCE—Manufacturing rights for **brass wire pins with plastic heads.** Firm's current line include needles, pins, paper clips and fasteners. Employs 500; has good commercial reputation. Mr. Jacques Bohin, General Manager, Etablissements Bohin, 24 rue du Capitaine Ferber, B.P. 45, 92-Issy-les-Moulineaux, France. WTD. P-71680

4231 — YUGOSLAVIA — Experienced Zagreb freight handling organization planning major **freight terminal** seeks inquiries from possible investors. Welcomes product information from truck terminal equipment producers and will provide information to shippers regarding servicing of truck freight to Central and Eastern Europe, the Balkans and Near East. Planned terminal to include service facilities for Yugoslav and international truck traffic, transit lodging for drivers, warehouse for ordinary and containerized freight and parking for 100 heavy trucks. Estimated cost about $4 million. Prime location adjacent major national and international highways. Operation of first phase of facility planned to begin by December 1972. Mr. Mitar Rogulja, Director, SKLADISTA, 4100 Zagreb-Strojarska 6, Yugoslavia. P-71668

## Licensing In U.S.

*For additional information on opportunities to manufacture foreign firm's products in the U.S., write Commerce's Office of International Investment, BIC-874, Bureau of International Commerce, Department of Commerce, Washington, D.C. 20230, telephone Area Code 202-967-2248, referring to the appropriate FILE number assigned each opportunity listed below.*

CANADA—A Canadian manufacturer of children's and adult wear and winter sportswear wishes to have its line manufactured under license in the U.S. The license offered is for manufacturing only and not for distribution. Presently the Canadian company exports much of its production to the U.S. **File 2109**

GERMANY—A German engineer is offering a manufacturing license for a portable work bench suitable for the finishing of wood, plastic materials, metals, etc. The unit can also be used as a turning lathe, a winder for spooling yarn, or wire, a bending device for rods and slates or as a pottery tool. **File 2110**

ITALY—An established Italian firm producing machines and equipment for vacuum-filling containers in the food, pharmaceutical and chemical industries, offers manufacturing license for their vacuum pumps and high speed filling machines. It is claimed the equipment is particularly robust, requiring little maintenance and can maintain a very high vacuum at rapid production speeds. **File 2111**

NETHERLANDS—A Netherlands manufacturer of marine communication and navigation equipment would like to arrange a manufacturing license for its marine radio telephones. These units are specially designed for ocean-going vessels, coastal shipping, fishing and inland navigation. **File 2112**

NETHERLANDS—An established company offers a manufacturing license to a U.S. firm to make permanent magnetic equipment. This includes a range of magnetic earth clamps, industrial lamps on a magnetic base, iron-particle removers in a variety of models, and several models of a magnetic street cleaner for removing iron particles from industrial and building sites, airports, and supply routes. **File 2113**

NETHERLANDS—A Netherlands company would like to have manufactured in the U.S. under license their semi- and fully automatic water softeners, which reportedly can process water at temperatures up to 185 degrees fahrenheit without trouble. These softeners are designed in accordance with the "up-flow" system and use the cation-exchanger principle which replaces calcium and magnesium ions by sodium ions. **File 2114**

NETHERLANDS—A Netherlands manufacturer of small-air-cooled transformers, automatic switches, electric and electronic apparatus and program switches offers a license to manufacture their switching devices for control of automatic processes and for automatic sequence control to a U.S. firm. Reportedly, this company is well known in the Netherlands and exports to all European countries. **File 2115**

SWITZERLAND—The manufacturer of a new monorail—suspension track system for use in industry, commerce, large stock warehouses and hospitals offers same for manufacturing under license to a suitable U.S. firm. Each trolley of the system is powered individually, only one rail is needed, and the use of power is considerably reduced. It may be used horizontally or vertically and is automatically controlled to a preset program. **File 2116**

SWITZERLAND—A Swiss manufacturer of electronic devices and quality tools offers a license for manufacturing its fully transistorized circuit tester. An accoustical signal which varies according to the resistance of the items being tested indicates the result of the measurement. This product is reported to be well-known in almost almost all Western European countries and has been purchased by U.S. companies after seeing it at plants of European firms located in the United States. **File 2052-R**

## Australian Firm Wants To Make Varied U.S. Items

A large Australian firm with factories and marketing outlets in every state of the Commonwealth is interested in licensing agreements with American companies for the manufacture of a wide range of plant and equipment for the Australian market.

Among items particularly sought are air pollution control equipment, desalination equipment, ship loaders for the mining industry, heat exchanger equipment, sewage and industrial effluent control equipment, mining and other industry equipment, particularly items requiring a reasonable degree of steel plate fabrication. While the company is especially interested in the above items, it is prepared to consider licenses for other suitable engineering products as well as agency representation for U.S. manufacturers. WTD.

Write: The Marketing Manager, Steel Mains Ltd., P.O. Box 441, South Melbourne 3205, Victoria, Australia.

## Argentine Province Asks Bids To Build Electric Power Line

The Governor of Argentina's Province of Chubut, Rear Admiral Jorge A. Costa, has announced that Aguay Energia Electrica, a Government agency in charge of distributing water and electricity, will invite bids in December for the laying of a high tension electric power transmission line between the Florentino Ameghino Dam and the City of Comodoro Rivadavia. The budget estimate for this project, which will include the supply of the necessary equipment for the laying of the transmission line, will amount to 18 million Argentine pesos (the present rate of exchange is five Argentine pesos per dollar for exports and imports—and certain related costs—and a fluctuating rate for all other legal transactions, which has recently varied between 7.60 and 8.25 pesos to the dollar). The project will be partially financed by an Inter-American Development Bank loan. Interested American suppliers and/or contractors of electricity transmission lines may correspond directly with Agua y Energia Electrica at the following address: Corrientes 531, 1° Piso, Buenos Aires.

## Sulphuric Acid-Building Steel Plant Planned On Cyprus

The Hellenic Mining Co. Ltd., P.O. Box 1510 & 2280, Nicosia, invites tenders for the construction of an industrial complex for the processing of about 200,000 tons of iron pyrites annually to produce sulphuric acid, fertilizer, and structural steel. The plan envisages the construction of a roasting and cleaning plant; sulphuric acid plant; sulphuric acid storage plant; single superphosphate plant; granulation-ammoniation plant; cinders dressing plant; pelletizing and reduction plant; steel plant; continuous casting plant; rolling-mill plant; power station. Copies of tender available from International Business Opportunities Staff, BDC-584, Rm. 4813, U.S. Dept. of Commerce, Washington, D.C. 20230.

# Foreign Trade Opportunities

*These trade opportunities are based on reports received from the U.S. Foreign Service by the Business Opportunities Staff and other units of the Bureau of Domestic Commerce (BDC), U.S. Department of Commerce, Washington, D.C. 20230. The commodities in which foreign firms have interest are indicated by the five-digit numbers and commodity classifications which are from the Standard Industrial Classification (SIC) Manual and the Numerical List of Manufactured Products, 1967 Census of Manufacturers, used extensively by Government and industry.*

*U.S. firms should be aware that the listing in* Commerce Today *of opportunities to trade in specific commodities and technical data does not necessarily imply approval of their export by the Department of Commerce pursuant to the Export Administration Act of 1969. Applicable export licensing regulations must be followed.*

*Every effort is made to include only firms or individuals with good reputations. However, the Department cannot be responsible for any trade relations.*

*The mark (●) indicates that this trade opportunity is a request for bids by a foreign government agency. A (★) at the end means that additional information may be borrowed by U.S. firms from the individual division of BDC. To avoid delays, requests for loan material should specify the country, commodity and foreign government agency.*

*WTD indicates that a World Trade Directory Report containing financial and business background information on the foreign firm is available for $2 from the U.S. Department of Commerce, BIC-924, Washington, D.C. 20230.*

## Direct Sales

*Specific foreign firms have expressed interest in direct purchases of the products below. See also the "Agencies" listing.*

### Field crop farms

**01130 — NETHERLANDS** — Milo, other kinds of corn. VERVEECO, Attn: W. Verheijen, Mgr. (importer, agent, exporter/commission merchant), 58 Coolsingel, or P.O. Box 30031, Rotterdam. WTD 10/71.

**01190—NETHERLANDS**—Rapeseed, linseed, other types of seed for bird feeding industry. VERVEECO, Attn: W. Verheijen, Mgr. (importer, agent, exporter/commission merchant), 58 Coolsingel, or P.O. Box 30031. Rotterdam. WTD 10/71.

### Fruit, tree nut, vegetable farms

**01230—CANADA**—Fresh fruits, vegetables (all kinds). Western Commodities Ltd., Attn: R. Leitch, Mgr. (importer, dist., agent), 6541 Telford Ave., Burnaby, B. C. WTD 11/71.

### Canning, preserving foods

**20310—CANADA** — Canned sea food products. Western Commodities Ltd., Attn: R. Leitch, Mgr. (importer, dist., agent), 6451 Telford Ave., Burnaby, B. C. WTD 11/71.

**20330—CANADA**—Canned fruits, vegetables. Western Commodities Ltd., Attn: R. Leitch, Mgr. (importer, dist., agent), 6451 Telford Ave., Burnaby, B.C. WTD 11/71.

**20331—NEW GUINEA** — Canned fruits, vegetables. J.B.D. Indent Agency (agent, retailer), Attn: James Cheung, P.O. Box 184, Rabaul, Territory of Papua and New Guinea. WTD in prep.

**20341—PORTUGAL**—Freeze dried fruit juice, baby foods. SOVENDAL-Sociedade Distribuidora de Produtos de Alimentação e Higiene, S.A.R.L. (importer, dist.), Apartado 2868, Lisbon 2. WTD in prep.

### Grain mill products

**20421—THAILAND**—Soybean meal for manufacture of poultry feed. Requests samples, c.i.f. Bangkok quotations. Direct purchase & agency. Sri Thai Pasusuk Feed Mill Co., Ltd. (importer, dist., mfr.), 821 Rama IV Rd., Sapan Luang, Bangkok 5. WTD 10/71.

**20455—NIGERIA**—Cake mixes, premix type; sponge, etc., to which only water is added. Approximately 15,000 lbs. per mo. Only manufacturers need to reply. De FactorWorks Ltd. (importer, dist., mfr.), 55/59 Ojuelegba Rd., Surulere, P.O. Box 31, Yaba, Lagos. WTD in prep.

### Broad woven fabric mills, manmade fiber, silk

**22210—AUSTRIA** — Drapery and home decorating fabrics; shantung, shantung satin, double satin, so called "stries," etc. Rudolf Schantl (importer, dist., retailer), Landstrasse 47, A-4020 Linz/Donau. WTD 1/71.

### Industrial chemicals

**28181 — SWITZERLAND** — Cyclic lubricating oil additives, other petroleum, gasoline, diesel oil additives. Werkzeugmaschinen-Handels AG (importer, dist.), Im Aegler 3r, 8153 Rumlang. WTD 11/71.

### Synthetic materials

**28210 — CZECHOSLOVAKIA** — Polyvinyl chloride for production of plastic leather. Technoplast (mfr.), Albin Slezacek, researcher, Chropyne.

**28215 — SWITZERLAND** — Self hardening resins, sealants, for assembly of metal parts, novelty technical aerosols. Werkzeugmaschinen-Handels AG (importer, dist.), Im Aegler 3r, 8153 Rumlang. WTD 11/71.

### Soap, detergents, cleaning preparations, perfumes, cosmetics

**28423—SWITZERLAND** — Degreasing compounds for metalworking industry. Werkzeugmaschinen-Handels AG (importer, dist.), Im Aegler 3r, 8153 Rumlang. WTD 11/71.

**28424 — SWITZERLAND** — Rust removers, metal polish, anti-seize lubricants, novelty technical aerosols. Werkzeugmaschinen-Handels AG (importer, dist.), Im Aegler 3r, 8153 Rumlang. WTD 11/71.

**28445 — HONDURAS** — Cosmetics, especially deodorants, face and body powder and talcum, make-up, etc. Direct purchase & agency. Agencia "La Mundial" de María Elena G. de Yuja (importer, dist., agent), 7a. Calle S. O., No. 74, Barrio Suyapa, San Pedro Sula. WTD 9/71.

**28445 — ZAMBIA** — Cosmetics suitable for customers who are mainly black. Prices f.o.b. Northern Drug Co. (1968) Ltd. (importer, dist.), P.O. Box 202, Kabwe. WTD in prep.

### Plastic products

**30798—SWITZERLAND**—Plastic novelties, gadgets, specialties, fast moving consumer goods, not requiring post sales service. Werkzeugmaschinen-Handels AG (importer, dist.), Im Aegler 3r, 8153 Rumlang. WTD 11/71.

### Steel mill products

**33123—HONDURAS**—Tinfree steel, size 20″ x 28″, tolerance 0+1/16″, temper T3, matte finish, weight 300 tons 95#, 900 tons 100#, electrolyte (type), coating .25, .25; terms: L/C 90 days; price: c.i.f. Puerto Cortes per m.t., 1,200 m.t. per shipment. Envases Industriales Hondureños, S. A. (E.I.H.S.A.), Ing. Marco Antonio Rietti (importer, mfr.), Apartado Postal No. 88, San Pedro Sula, Cortés. WTD 7/71.

**33155—GERMANY**—Five kg. (appr. 11 lbs.) of spring wire, tungsten alloy steel (4.25% tungsten, 0.6% vanadium, 2.35% chromium, 0.3% manganese, 0.3% carbon); straightened in rods, 0.35 millimeter diameter (+/—0.01 millimeter), springy, hardened, polished—for use in wire print heads in data processing equipment. W.D. Schneider (mfr.), 16 Adlerweg, 4794 Schloss Neuhaus. WTD in prep.

### Rolling, drawing, extruding of nonferrous metals

● **33500—ETHIOPIA**—Supply of two million meters of wire bronze polythene

insulated 1PX 0.8 MM. Tender No. 19/71. Bid deadline Dec. 29. Contact Imperial Board of Telecommunications of Ethiopia, P.O. Box 1047, Addis Ababa, Ethiopia.

● 33500—INDIA—Supply of 1100 Kms, switch board PVC Copper Conductor, 0.60 MM dia of different sizes, 30 Kms. L.S. terminating cable, 0.60 MM dia and 94,000 nos. switch board plugs, 3 way. Tender No. ES9/202/39/002/003/Cell-28/V1. Bid deadline Dec. 22. Contact Director General of Supplies and Disposals, Jeevan Tara Bldg., Parliament St., New Delhi-1, India.

33578—HONDURAS—Used but still serviceable electrical underwater cable capable of carrying 150 kw. Industria de Armadores y Pesqueros Guanajeños, S. de R. L., Attn: Bruce Borden, Pres. (importer, dist., mfr.), Guanaja, Islas de la Bahía. WTD in prep.

### Fabricated structural metal products

34421—TAIWAN—Revolving doors. Sun Stone Industrial Co., Ltd. (importer, agent), 9, Lane 91, Chung Hwa Rd., Taipei 100. WTD in prep.

### Fabricated metal products

34940 — CZECHOSLOVAKIA — Metal part of regulation valve for household gas burners which changes continuous signal to bipolar signal; burner has output of 60,000 calories per hr. and does not run on electrical power. Moravia (mfr.), Ing. Jan Vajda, chief of department of research, Marianske udoli near Olomouc.

34970—KOREA—Stamping foils. Requests quotations, specifications. Sam Jin Enterprise Co., Ltd. (importer, dist., agent), Kwanghwamoon P.O. Box 438, Seoul. WTD in prep.

34944—INDIA—Solenoid valves suitable for heavy furnace oil heated up to 200°F at pressure of 100 PSI; two-way closed solenoid valves having oil throughout of approximately 12-120 GPH and 40-250 GPH respectively. Westerwork Engineers Private Ltd. (mfr.), 15 Bhandup Village Rd., Bhandup, Bombay 78 NB. WTD in prep.

34990—SWITZERLAND—Metal novelties, gadgets, specialties, fast moving consumer goods, not requiring post sales service. Werkzeugmaschinen-Handels AG (importer, dist.), Im Aegler 3r, 8153 Rumlang. WTD 11/71.

### Engines, turbines

35193—GERMANY—Internal combustion engines, 0.5 to 0.9 hp., for small garden equipment. Zahnradfabrik Haenel & Umbach (mfr.), 1 Siemensstrasse, D-7107 Bad Friedrichshall. WTD 8/71.

### Farm machinery

35226—NETHERLANDS — Machinery, equipment for harvesting, storage of hay. Exclusive representation. P. Heesters & Zn. N.V.; Attn: J. Geschiere (importer, agent), 26 Driehoeven, Haaren (N.Br.). WTD 11/71.

35228—NETHERLANDS — Agricultural machinery, equipment for silage, including corn silage. Exclusive representation. P. Heesters & Zn. N.V.; Attn: J. Geschiere (importer, agent), 26 Driehoeven, Haaren (N.Br.). WTD 11/71.

35228—THAILAND—Machinery to produce poultry feed at capacity of 150 metric tons a day; poultry incubators. Requests detailed information, catalogs and prices. Sri Thai Pasusuk Feed Mill Co., Ltd. (importer, dist., mfr.), 821 Rama IV Road, Sapan Luang, Bangkok 5. WTD 10/71.

### Construction, mining, materials handling machinery, equipment

35340—SPAIN—Variable speed electric motors for passenger and industrial elevators; automatic doors for passenger elevators. Enrique Cardellach y Hermano, S.A. (mfr.), Calle Casanova, 25-26, Barcelona (11). WTD in prep.

35361 — CZECHOSLOVAKIA — Materials handling equipment for transportation and loading of heavy cargo such as hoists and cranes; equipment for unloading loose materials from ships. Requests offers, quotations. IVTAS, Integration of Producers of Transportation and Building Machinery (mfr.), J. Moucka, Leninovy sady 274, Chrudim IV.

## Special Action

*Each of the following trade notices is deemed to rate the special attention of American manufacturers and suppliers by the U.S. Commercial Officers overseas.*

**36623—NETHERLANDS — Microwave and ultrasonic burglar alarm equipment; other crime detection and prevention equipment, Sales territory: Europe. Direct purchase and/or agency. Alarm Equipment Supplies Nederland. Attn: R. J. J. Th. Schraven, Gen. Mgr. (importer, dist., installer/exporter), 9 Koningsweg, 's-Hertogenbosch. WTD 10/71.**

**35892—ISRAEL—Car washing machines with brush systems. Moise Carasso & Sons Ltd. (importer, dist./wholesale, retailer), P.O. Box 991, Tel Aviv. WTD 2/71.**

**35892—NETHERLANDS — Apparatus, valves and controls for water treatment by means of ion exchange; i.e., water softeners, demineralizers, decarbonizers, all in fully automatic mode; filters for deironing and demanganizing; similar products. Sales territory; Europe. Agency and/or licensing arrangement. Figee-Vlaardingen N.V. Attn: J. B. Lubbers, Asst. Mgr. (importer, dist., mfr./exporter), ZZ 15 Koningin Wilhelminahaven, Vlaardingen. WTD 7/71.**

### Metalworking machinery

35410—CZECHOSLOVAKIA — Chassis building presses of 500 tons load and higher. AZNP (Automobile factory) Frantisek Balak, technical mgr., AZNP, Vrchlabi.

### Special industry machinery

35513—PORTUGAL—Supply and installation of complete feed plant, with annual capacity of about 150,000 tons, working 24 hrs. per day. Produits et Engrais Chimiques du Portugal (SAPEC) S.A. (mfr.), Apartado 2349, Lisbon. WTD in prep.

35522—ZAMBIA—Machinery for molding, pressing military style hats, such as beret, peak combat hat. Prices c.i.f. Lusaka. City Clothing Factory, Attn: C. J. Vaghella (mfr.), P.O. Box 1842, Lusaka. WTD in prep.

35540—CZECHOSLOVAKIA—Pulp mill machinery for new plant for processing waste paper, especially paperboard. Requests price quotations. Research Institute of Paper & Cellulose (mfr.), Ing. Anton Kostka, chief of department, Lamacska 7, Bratislava.

35593—CZECHOSLOVAKIA — Machinery for production of plastic leather (on basis of polyvinyl chloride). Technoplast (mfr.), Albin Slezacek, researcher, Chropyne.

35593—NETHERLANDS—Laser equipment for plastics, textile industry, to cut plastic sheets and nylon, polyester fabrics. Exclusive representations requested for Europe, possible license arrangements. Kors Technische Handelsonderneming N.V. (importer, dist.), Kwinkweerd 2, Lochem. WTD in prep.

35593—THAILAND — Plastic-working machinery, complete set, for making plastic blood bags, sterilized; solution bags. Requests catalogs, c.i.f. Bangkok prices. Visanu Osoth Ltd. Partnership (importer, dist.), 944/26 Rama IV Rd., Bangkok. WTD in prep.

35595—INDIA—One copper plating plant for coating mild steel wires in coil forms weighing 15 kg.-25 kg. and diameter 4 mm.-5 mm. Indian Hume Pipe Co. Ltd. (mfr.), Antop Hill, P.O. Wadala, Ballard Estate, Bombay 31. WTD in prep.

### General industry machinery

● 35600—COLOMBIA—Three crude water pumps each with a 1.5 cubic meters per second capacity, four mud pumps, four pumps for filtered water each with a capacity of one cubic meter per second, four rotary disc screens, two contact units for solid materials, one bridge crane, 18 small pumps for treated water, electrical control equipment and equipment for electrical sub-station. Tender No. BE-010-A; bid deadline Jan. 25. Plan Maestro de Acueducto y Alcantarillado, Banco Industrial Colombiano, Piso 6. Specifications may be examined at the offices of the Plan Maestro or purchased at the Caja General de EMCALI, Carrera 4, No. 9-41, Cali, Colombia, for 2,000 pesos Colombian currency, or $100 (U.S.) plus postage if requested by mail. This amount will not be refunded.

35690—PARAGUAY—Equipment to produce 10 x 10 and 15 x 15 centimeter dry ice blocks, to include additional equipment to produce carbon dioxide (carbonic acid). Super Helados Brasil (dist., mfr.), Calle 25 de Diciembre y Alberdi, Asuncion. WTD in prep.

### Office, computing, accounting machines

● 35700—ALGERIA—Supply and installation of a computer system at the Secretariat of Irrigation. Bid deadline Jan. 25. Invited by the Secretariat d' Etat a l' Hydraulique (ex-Grand Seminaire) Kouba Alger, Algerie. Terms and specifications, in French, available on short term loan basis from the Business, Photographic, and Scientific Equipment Division, BDC-708, U.S. Department of Commerce, Washington, D.C. 20230. ★(202-967-2939.)

● 35700—IRAN—Supply of automatic scale for weighing cigarettes, equipped with conveyor belt and relative electromotor. Bid deadline Dec. 26. Invited by the Iranian Tobacco Co., Iranshahr

Avenue, Tehran, Iran. Terms and specifications available on short term loan basis from the Business, Photographic, and Scientific Equipment Division, BDC-708, U.S. Department of Commerce, Washington, D. C. 20230. ★(202-967-2939.)

**35731 — CZECHOSLOVAKIA** — Analog computer, small. Research Institute of Rubber & Plastics Technology Attention: Dr. Ing. Miroslav Vesely, Gottwaldov. WTD None

### Service industry machines

**35850—CZECHOSLOVAKIA** — Air-conditioning equipment and equipment for pollution control in cement producing factories, quarries, crushing plants. Regional Hygienic Center, Ing. Jiri Kupilik, Cechova 15, Pilsen.

### Electric transmission, distribution equipment

● **36100—COLOMBIA**—Supply insulators for series of transmission lines throughout the country. Tender UPIB-A-3 No. 0015, bid deadline Jan. 4. Participants must be registered in country and have local representation for distribution purposes. Specifications may be purchased from Unidad Ejecutora, Instituto Colombiano de Energia Electrica—ICEL, Carrera 13, No. 27-00, Oficina 624, Bogota, for $35 per set. Bidders must include a seriousness guarantee of $9,000, valid for 120 days as of the date of closing of the tender.

● **36100 — INDIA** — Supply following quantities and types of power transformers: 120 of 132 kv. current, 23 of 132 kv. neutral current, 30 of 66 kv. current, 8 of 66 kv. neutral current, 150 of 33 kv. current, and 16 of 33 kv. neutral current. Global Tender No. IDA/HSEB/3, bid deadline Feb. 9. Tender documents available from India Supply Mission, located at 2536 Massachusetts Ave., N.W., Washington, D.C. 20008, at $13.33 per copy.

● **36100—IRAN**—Supply panels: 2,375, with 20 kv. switchgear containing circuit breakers, switchfuse, switch or metering equipment; circuit breakers: 750 of 1500 ampere low voltage; distribution boards, 750 low voltage; 20 kv. single core cables and accessories, 25,000 meters; low voltage single core cable and accessories, 30,000 meters; earthing cable and accessories, 30,000 meters. Reference No. IB-DSG-09.71 bid deadline Jan. 29. Tender documents available from Procurement Dept., Tehran Regional Electric Co., Jaleh Square, Tehran, at a price of $120 per copy.

● **36100—MALAYSIA** — Supply Transformers: eight 11,000/3,300/412 Volt totalling 27,000 kva.; three 3,300 volt 250 mva. air circuit breaker ten-panel switchboards and one seven-panel extension to existing switchboard; and nine 415 volt 25 mva. air break circuit breaker, switchfuse, isolator and contactor boards totalling approximately 234 circuits. Tender No. GB/2032/21, bid deadline Feb. 2. World Bank financing and firms must be prepared to submit complete tenders. Tender documents available from Brighton Office of Messrs. Preece, Cardew & Rider from Nov. 30 on, upon receipt of check for $25; additional sets at $6 per copy.

**36110—ITALY**—Electric, electronic measuring instruments. Smetradio (importer, dist., agent), Via S. Antonio da Padova 14 e 11, 10121 Torino. WTD 4/71.

**36112 — CZECHOSLOVAKIA** — Electronic testing equipment for automobile engines, accessories. Complete test lines for passenger cars, trucks. Requests offers, price quotations. CSAO (Czechoslovak Automobile Repairs), Zdenek Boruvka CSAO Hradec Kralove, Ulice ROH 588.

### Electrical industrial apparatus

**36220 — HONDURAS** — Lighthouse, including beacon light and tower. Light should be of approximately 800,000 candle lights, 30-mile range. Industria de Armadores y Pesqueros Guanajeños, S. de R. L., Attn: Bruce Borden, Pres. (importer, dist., mfr.), Guanaja, Islas de la Bahía. WTD in prep.

**36220—ITALY**—Electric and electronic industrial controlling instruments, writing and self-regulating. Smetradio (importer, dist., agent), Via S. Antonio da Padova 14 e 11, 10121 Torino. WTD 4/71.

### Communication equipment

**36622—POLAND**—Television broadcast equipment, closed circuit systems, cassettes for use in television, and audio-visual training aids, devices for classrooms, laboratories. Inz. Kazimierz Prynda, Dir. Center for Technical Progress (Osrodek Postepu Technicznego) Buczka 12, P.O. Box 454, Katowice-2.

### Electronic components, accessories

**36730—FRANCE**—Electrostatic shunting memory cathode tube. Literature, price lists requested. RACIA (importer, mfr., agent), 65, 65 bis Blvd. Pierre ler, 33 Bordeaux. WTD in prep.

**36795—ENGLAND**—Clips for use in electronic components, made of beryllium copper subsequently tin plated and formed by multi stage tooling. Quantity: in 1972—47,250; 1973—125,000; 1974—224,000. First deliveries by early 1972 or mid-1972 at latest. Morganite Resistors Ltd. (dist., mfr.), Bede Industrial Estate, Jarrow, County Durham. WTD in prep.

### Instruments for measuring, indicating, controlling physical characteristics

**38212—CZECHOSLOVAKIA**—Ph meters for measuring acidity in solutions; floatmeters; measuring devices for indicating existence or non-existence of flows in reactors. CVUT (Czechoslovak High School of Technical Learning), Faculty of Food Machinery, Attention: Ing. Ladislav Chladek, Technicka 4, Prague 6-Dejvice.

**38213—CZECHOSLOVAKIA** — Testing instruments for testing physical qualities of plastics, rubber. Research Institute of Rubber & Plastics Technology, Dr. Ing. Miroslav Vesely, Gottwaldov.

**38213—ITALY**—Industrial instruments for mechanical and rubber industry. Smetradio (importer, dist., agent), Via S. Antonio da Padova 14 e 11, 10121 Torino. WTD 4/71.

### Optical instruments, lenses

**38311—NETHERLANDS**—Laser devices for use in cutting plastic sheets, nylon and polyester fabrics. Exclusive sales representations requested, possible license arrangements. Kors Technische Handelsonderneming N.V. (importer, dist.), Kwindweerd 2, Lochem. WTD in prep.

**38613—MEXICO** — Projectors, movie cameras. Correspondence requested in Spanish. Representaciones Garmad (Carlos Moises Elias) (importer, dist., retailer), Isla Mujeres, Quintana Roo. WTD in prep.

### Manufacturing industries

**39999—CANADA**—Non-food items for retail supermarkets. Western Commodities Ltd., Attn: R. Leitch, Mgr. (importer, dist., agent), 6541 Telford Ave., Burnaby, B. C. WTD 11/71.

## Agencies

*Specific foreign firms have expressed interest in agency agreements for the products listed below. Exclusive agencies for these products are wanted only if specified.*

### Field crop farms

**01136—SPAIN** — Dried beans, lentils, peas. Perez-Pujol (agent), Via Layetana, 24 1°C Barcelona (3). WTD 9/71.

**01137—SPAIN**—Food, feed grains. Perez-Pujol (agent), Via Layetana, 24, 1°C, Barcelona (3). WTD 9/71.

**01195—SPAIN**—Oil seed cakes. Perez-Pujol (agent), Via Layetana, 24, 1°C, Barcelona (3). WTD 9/71.

### Fruit, tree nut, vegetable farms

**01220—SPAIN** — Tree nuts (edible). Perez-Pujol (agent), Via Layetana, 24, 1°C, Barcelona (3). WTD 9/71.

### Dairy products

**20231—SPAIN**—Whey powder and skim milk powder for feeds. Perez-Pujol (agent), Via Layetana, 24, 1°C, Barcelona (3). WTD 9/71.

### Canning, preserving foods

**20330—ENGLAND**—Non-perishable high quality delicatessen food products. Cradock Manners Parrish & Fenn Ltd. (importer, dist.), 4 Cowcross St., London, EC1M 6DU. WTD in prep.

**20331—CANADA**—Fruit cocktail, sliced peaches, Bartlett pears. M. D. Shears, Ltd. (agent), 524 Water St., P.O. Box 1478, St. John's Newfoundland. WTD in prep.

**20341—SPAIN**—Dried, dehydrated fruit. Perez-Pujol (agent), Via Layetana, 24, 1°C, Barcelona (3). WTD 9/71.

### Textile goods

**22950 — ENGLAND** — Specialized industrial fabrics for aircraft flooring, electronic printed circuits; open mesh impregnated fabrics for grinding wheel trade. Bryce, Robarts & Co. Ltd. (importer, dist., agent), Cree House, Cree-

church Lane, London, E.C. 3A 5BQ. WTD in prep.

### Pulp mills, products

**26112—KOREA**—Other pulp, including wood, and pulp mill by products, except tall oil. Requests quotations ASAP. Bando Trading Co., Ltd. (importer, dist., agent), I.P.O. Box 1899, Seoul. WTD 8/71.

### Paperboard mills, products

**26310—HONG KONG**—Kraft liner board. Paterson Simons (HK) Ltd. (formerly Ufinimpex Ltd.) (dist.), Kayamally Bldg., 7/F, 22-B Queen's Rd. C., P.O. Box 686, Hong Kong. Cable: PATERSIMCO. WTD in prep.

### Converted paper, paperboard products

**26472—FRANCE**—Non-woven textiles. S.N.C. Papone (dist., mfr., agent), 45, Ave. Pasteur, 06-Antibes. WTD in prep.

### Industrial chemicals

**28150 — ENGLAND** — Bromaminic acid. Cambridge Chemical Co. Ltd. (agent), Whaddon, Royston, Hertfordshire. WTD in prep.

**28153 — AUSTRIA** — Synthetic organic pigments, toners for paint, varnish industry. Bleiberger Bergwerks Union A.G. (BBU) (importer, mfr., agent), P.O. Box 554, A-1010 Vienna. WTD 10/71.

**28163—AUSTRIA**—Chrome colors, other inorganic pigments for paint, varnish industry. Bleiberger Bergwerks Union A.G. (BBU) (importer, mfr., agent), P.O. Box 554, A-1010 Vienna. WTD 10/71.

**28183 — AUSTRIA** — Rubber-processing chemicals, plasticizers. Bleiberger Bergwerks Union A.G. (BBU) (importer, mfr., agent), P.O. Box 554, A-1010 Vienna. WTD 10/71.

### Synthetic materials

**28213—AUSTRIA**—Thermoplastic resins, plastics materials other than vinyl and polyethylene resins. Bleiberger Bergwerks Union A.G. (BBU) (importer, mfr., agent), P.O. Box 554, A-1010 Vienna. WTD 10/71.

**28214—AUSTRIA**—Thermosetting resins, plastics materials other than casein resins. Bleiberger Bergwerks Union A.G. (BBU) (importer, mfr., agent), P.O. Box 554, A-1010 Vienna. WTD 10/71.

**28216—AUSTRIA**—Synthetic resins for protective coatings. Bleiberger Bergwerks Union A.G. (BBU) (importer, mfr., agent), P.O. Box 554, A-1010 Vienna. WTD 10/71.

### Drugs

**28331—SPAIN**—Antibiotics for use in food preservation; feed supplements. Perez-Pujol (agent), Via Layetana, 24, 1°C, Barcelona (3). WTD 9/71.

**28349—SPAIN**—Vitamins, minerals for use in feed supplements. Perez-Pujol (agent), Via Layetana, 24, 1°C, Barcelona (3). WTD 9/71.

**28349—THAILAND**—Vitamins, minerals for poultry. Requests samples, c.i.f. Bangkok quotations. Sri Thai Pasusuk Feed Mill Co., Ltd. (importer, dist., mfr.), 821 Rama IV Rd., Sapan Luang, Bangkok 5. WTD 10/71.

### Agricultural chemicals

**28712 — THAILAND** — Fertilizers, compound, granular type, NPK and NP, 100-500 metric tons per shipment. Requests samples, c.i.f. Bangkok prices. The Seri Agricultural Chemicals Co. Ltd. (importer, dist.), 73 Chakrapetch Rd., P.O. Box 2161, Bangkok 2. WTD in prep.

**28790—THAILAND**—Insecticides, pesticides, herbicides, wettable powder and emulsive concentrate, 5-100 metric tons per shipment. Requests samples, c.i.f. Bangkok prices. The Seri Agricultural Chemicals Co., Ltd. (importer, dist.), 73 Chakrapetch Rd., P.O. Box 2161, Bangkok 2. WTD in prep.

### Chemical products

**28950—AUSTRIA**—Carbon black for rubber industry. Bleiberger Bergwerks Union A.G. (BBU) (importer, mfr., agent), P.O. Box 554, A-1010 Vienna. WTD 10/71.

### Plastic products

**30797—BAHAMAS**—Plastic housewares; dishdrainers, glasses, wastebaskets, etc. Contrax Ltd. (agent), P.O. Box 4138, Nassau. WTD 11/71.

### Leather goods

**31990—FINLAND**—Saddlery and harness and accouterments (except western type). Kilanto & Co., Attn: Leo Kr. Kilanto, Dir. (importer, dist., retailer), Lokkalantie 16, Helsinki 33. WTD 3/71.

### Steel mill products

**33176—JAMAICA**—Tubing and pipe—stainless steel, for heavy industrial use; food processing equipment. Tank-Weld Ltd., Attn: Dir., David Stockhausen (mfr., retailer), 27 Seaward Dr., P.O. Box 213, Kingston 11. WTD in prep.

### Primary smelting, refining of nonferrous metals

**33397—AUSTRIA**—Primary nonferrous metals, smelted or refined, alloyed and unalloyed. Bleiberger Bergwerks Union A.G. (BBU) (importer, mfr., agent), P.O. Box 554, A-1010 Vienna. WTD 10/71.

### Secondary smelting,refining of nonferrous metals

**33416—AUSTRIA**—Secondary nonferrous metals, alloyed and unalloyed. Bleiberger Bergwerks Union A.G. (BBU) (importer, mfr., agent), P.O. Box 554, A-1010 Vienna. WTD 10/71.

### Cutlery, hand tools, general hardware

**34231 — THAILAND** — Hand tools, wrenches, combined with grip locking. Requests catalogs, c.i.f. Bangkok prices. Visudhi Pharnich Co., Ltd. (importer, dist.), 659 New Rd., Samyaek, P.O. Box 1893, Bangkok. WTD in prep.

**34232—BAHAMAS** — Hand and edge tools. Contrax Ltd. (agent), P.O. Box 4138, Nassau. WTD 11/71.

**34250—FINLAND**—Reels of bandsaw blades made of different kinds of high-speed steels and of types for use by metalworking industries; blade widths from $\frac{1}{4}$" to $1\frac{1}{4}$". Exclusive agency. Pertik Ky., Attn: Veikko Tikkanen, Mng. Dir. (importer, dist., mfr.), Ahertajantie 6 D, Tapiola. WTD 3/71.

**34290—BAHAMAS** — Marine hardware. Contrax Ltd. (agent), P.O. Box 4138, Nassau. WTD 11/71.

**34294—ISRAEL**—Builders' hardware including all types of doorlocks, padlocks, door closers, checking devices, hinges/butts, emergency exit devices, window, cabinet hardware. Exclusive agency. Pantrysa Ltd. (dist., agent, exporter), El-Al Bldg., 32 Ben Yehuda Rd., P.O. Box 26350, Tel Aviv. Cable address: ARSAFA TELAVIV. WTD in prep.

**34294 — THAILAND** — Builders' hardware, furniture hardware. Requests catalogs, c.i.f. Bangkok prices. Alcan Thai Co. Ltd. (mfr.), 10th Floor, Dusit Thani Office Bldg., 1-3 Rama IV Rd., P.O. Box 32, Bangkok. WTD in prep.

**34294 — BAHAMAS** — Locks, hinges, handles, door knobs, etc.; cabinet hardware. Contrax Ltd. (agent), P.O. Box 4138, Nassau. WTD 11/71.

**34295—FINLAND** — Saddlery and harness hardware (except western type). Kilanto & Co., Attn: Leo Kr. Kilanto, Dir. (importer, dist., retailer), Lokkalantie 16, Helsinki 33. WTD 3/71.

### Heating apparatus, plumbing fixtures

**34310—ISRAEL**—Enameled metal and iron plumbing fixtures to include bathroom fixtures of enameled iron, cast iron, pressed metal for bathrooms, lavatories, sinks, toilet, water closets; flush tanks; shower stalls of metal; plumbing fixtures all kinds of metal; urinals all types. Exclusive agency. Pantrysa Ltd. (dist. (wholesale), agent, exporter), El-Al Bldg., 32 Ben Yehuda Rd., P.O. Box 26350, Tel Aviv. Cable Address: ARSAFA TELAVIV. WTD in prep.

**34320—ISRAEL**—Sanitary pipe fittings (brass) for bath / shower / lavatory; plumbing fixtures including shower rods, lawn sprinklers. Exclusive agency. Pantrysa Ltd. (dist. (wholesale), agent, exporters), El-Al Bldg., 32 Ben Yehuda Rd., P.O. Box 26350, Tel Aviv. Cable address: ARSAFA TELAVIV. WTD in prep.

### Fabricted structural metal products

**34430—CANADA** — Cyclone units for tailings lines. Exclusive agency. Kraft Mill Supplies Ltd., Attn: R. Harding (importer, dist., agent), 1234 Marine Dr., North Vancouver, B.C. WTD 11/71.

### Fabricated metal products

**34940—CANADA** — Abrasive resistant piping for mining industry; corrosion resistant piping and valves for mining, pulp and paper industries. Exclusive agency. Kraft Mill Supplies Ltd., Attn: R. Harding (importer, dist., agent), 1234 Marine Dr., North Vancouver, B.C. WTD 11/71.

**34940—JAMAICA**—Valves and fittings—stainless steel, for heavy industrial use; food processing equipment. Tank-Weld Ltd., Attn: Dir., David Stockhausen (mfr., retailer), 27 Seaward Dr., P.O. Box 213, Kingston 11. WTD in prep.

### Construction, mining, materials handling machinery, equipment

**35360 — JAMAICA** — Steel handling equipment including wire rope slings, hooks. Tank-Weld Ltd., Attn: Dir., David Stockhausen (mfr., retailer), 27 Seaward Dr., P.O. Box 213, Kingston 11. WTD in prep.

### Special industry machinery

**35420 — ISRAEL** — Machines, related equipment for manufacture of staples, all types, for commercial, industrial use. Exclusive agency. Techen Enterprises—Industry & Trade Co. Ltd. (importer, dist.,

mfr.), 13 Leonardo DaVinci St., P.O. Box 1577, Tel Aviv. WTD 3/71.

### Metalworking machinery

**35482—BAHAMAS**—Hand tools, power driven. Contrax Ltd. (agent), P.O. Box 4138, Nassau. WTD 11/71.

### Special industry machinery

**35513 — YUGOSLAVIA** — Gamma-ray sterilization equipment for foodstuff, victuals, (220/380 V, 50 cycles). Jugohemija, Attn: Mr. Milan Vasic (importer, dist., agent), Gen. Zdanova 31, P.p. 441, 11001 Belgrade. WTD in prep.

### General industrial machinery

**35610—CANADA** — Slurry pumps. Exclusive agency. Kraft Mill Supplies Ltd., Attn: R. Harding (importer, dist., agent), 1234 Marine Dr., North Vancouver, B.C. WTD 11/71.

**35612—NETHERLANDS** — Pumps for liquid gas (multistage centrifugal). Rollo N.V., Attn: Mr. Bogaart (importer, dist., mfr.), Alexanderstraat 10, The Hague. WTD in prep.

**35613—UGANDA**—Pumps and domestic water systems. Armostahl A.G. (importer, dist., agent), P.O. Box 3575, Kampala. WTD 10/71.

**35614—JAMAICA** — Compressors; air, portable, stationary, diesel powered, range from 10 to 600 cu. ft. per min. Tank-Weld Ltd., Attn: Dir., David Stockhausen (mfr., retailer), 27 Seaward Dr., P.O. Box 213, Kingston 11. WTD in prep.

**35614—NETHERLANDS**—Gas compressors with pressures from 0-8 atm. Rollo N.V., Attn: Mr. Bogaart (importer, dist., mfr.), Alexanderstraat 10, The Hague. WTD in prep.

**35642—NETHERLANDS** — Aircleaners. Agency for Benelux countries and/or direct purchase. Bersma's Handelmaatschappij N.V., Attn.: C. S. Bersma, Mgr. (importer, dist., exporter), 62 van Riemsdijkweg, or P.O. Box 69, Rotterdam-22. WTD 10/71.

### Service industry machines

**35852—NETHERLANDS**—Air-conditioners. Agency for Benelux countries and/or direct purchase. Bersma's Handelmaatschappij N.V., Attn.: C. S. Bersma, Mgr. (importer, dist., exporter), 62 van Riemsdijkweg, or P.O. Box 69, Rotterdam-22. WTD 10/71.

**35860—NETHERLANDS** — Oil pumps ranging from 0-10.000m3/h. Rollo N.V., Attn: Mr. Bogaart (importer, dist., mfr.), Alexanderstraat 10, The Hague. WTD in prep.

**35891—NETHERLANDS**—Coffeemakers, percolaters. Agency for Benelux countries and/or direct purchase. Bersma's Handelmaatschappij N.V., Attn.: C. S. Bersma, Mgr. (importer, dist., exporter), 62 van Riemsdijkweg, or P.O. Box 69, Rotterdam-22. WTD 10/71.

### Electrical industrial apparatus

**36220—CANADA**—Controls, instrumentation applicable to pulp and paper industry, mining industry, oil pipelining, petroleum industry. Exclusive agency for Western Canada. Southwell Controls Ltd., Attn: L. H. Southwell (agent). 857 W. 3rd St., North Vancouver, B.C. WTD 11/71.

### Electronic components, accessories

**36790 — FRANCE** — Thermistor type blood flow meter. Descriptive literature, price lists requested. Racia (importer, mfr., agent), 65, 65 bis Blvd. Pierre ler, 33 Bordeaux. WTD in prep.

### Motor vehicles, equipment

**37150 — JAMAICA** — Truck trailers running gear (wheels, axles, etc.) for trailers from 1 to 60 tons. Tank-Weld Ltd., Attn: Dir., David Stockhausen (mfr., retailer), 27 Seaward Dr., P.O. Box 213, Kingston 11. WTD in prep.

### Motor vehicles, motor vehicle equipment

**37175—VIET NAM**—Ancillary automotive equipment; fittings, gadgets, accessories, etc., excluding replacements or spare parts. Requests quotations c.i.f. Saigon, catalogs. Cogema Viet Nam (importer, dist., agent), 406 Trinh Minh The, P.O. Box L 15, Saigon. WTD 10/71.

### Transportation equipment

**37992—FINLAND**—Wheels for trotting race carts. Kilanto & Co., Attn: Leo Kr. Kilanto, Dir. (importer, dist., retailer), Lokkalantie 16, Helsinki 33. WTD 3/71.

**37992—VIET NAM**—Trailers for boats. Requests quotations c.i.f. Saigon, catalogs. Cogema Viet Nam (importer, dist., agent), 406 Trinh Minh The, P.O. Box L 15, Saigon. WTD 10/71.

### Manufacturing industries

**39962—ENGLAND**—2 m/m 12" x 12" decorative P.V.C. contact floor tiles. Flooring Supplies (Tottenham) Ltd. (dist., mfr., exporter), Redlands, Coulsdon, Surrey, CR3 2HT. WTD in prep.

## Other Foreign Official Tenders

**ALGERIA**—A call for bids has been issued by the Secretariat General of Hydraulics for the **development of the perimeter of Kherba El Abadia,** which will involve the following works: 1) civil engineering work for three pump stations and tanks; 2) equipment for three pump stations; 3) supply and setting of a canalization made of pre-stressed concrete; 4) supply and setting of a canalization made of asbestos-cement, and 5) supply and setting of canalization made of steel covered with concrete. Documents relating to these bids are available from the Secretariat d'Etat a l'Hydraulique, Direction de l'Hydraulique de la Wilaya de Mostaganem, Mostaganem. Bids must be submitted by March 12.

**ETHIOPIA**—The Imperial Board of Telecommunications of Ethiopia has issued tender No. 21/71 for the supply of **twenty (20) single channel VHF radio link systems.** Bid deadline is Jan. 26. Copies of tender announcement and specifications are available from the Imperial Board of Telecommunications of Ethiopia, P.O. Box 1047, Addis Ababa for $3.50 per set including air mail, or on a short-term loan basis to firms located in the U.S. from the Communication Division, BDC-720, Room 4320, U.S. Department of Commerce, Washington, D.C. 20230. ★(202-967-4823)

**GREECE**—The Hellenic Telecommunications Organization (OTE) has issued tender no. 6907 for the supply of **thirty (30) telegram reception centers.** Bid deadline is Dec. 28. Copies of tender announcement and specifications are available from the Procurements Committee of OTE, 6 Klissovis St., Athens or on a short-term loan basis to firms located in the U.S. from the Communications Division, BDC-720, Room 4320, U.S. Department of Commerce, Washington, D.C. 20230. ★(202-967-4823)

**GREECE**—The Hellenic Telecommunications Organization (OTE) has issued tender No. 6869 for the **supply and installation of speech scramblers** for VHF FM radiotelephone equipment. Bid deadline is Dec. 29. Copies of tender announcement and specifications are available from the Procurement Committee of OTE, 6 Klissovis St., Athens, or on a short-term loan basis to firms located in the U.S. from the Communications Division, BDC-720, Room 4320, U.S. Department of Commerce, Washington, D.C. 20230. ★(202-967-4823)

**GREECE**—The Hellenic Telecommunications Organization has announced a further extension of the bid deadline on Tender 6800, for **HF ship-to-shore equipment.** The new date for submission of bids is Feb. 1. See *Commerce Today*, 9/6/71, p. 68, or *Commerce Business Daily*, 8/24/71, p. 13.

**JAMAICA**—The Ministry of Defense, Jamaican Coast Guard has expressed an interest in **marine radar and echo sounding equipment** to be installed on three coast guard vessels. Equipment brochures should be sent directly to the Jamaican Coast Guard (Ministry of Defense), Kingston, Jamaica.

**KUWAIT**—The Savings and Credit Bank has issued tender no. 401 for the supply installation and maintenance of **electrical and telephone distribution systems.** Bid deadline is Jan. 8. Copies of tender announcement and specifications are available from the Savings and Credit Bank, Secretary, Tender Committee, P.O. Box 1454, Kuwait, State of Kuwait.

**PANAMA**—The Directorate of Civil Aeronautics has announced a prequalification process for contractors interested in the construction of the new World Bank-financed Tocumen International Airport. The work will be divided into three major contracts: 1) earthworks and drainage ($3.4 million); 2) airfield pavement and lighting ($8 million); and 3) terminal buildings, roads and utilities ($12.4 million). Contractors may prequalify for any or all contracts. Questionnaire forms should be requested from: Directorate of Civil Aeronautics, P.O. Box 7501, Panama 5, Panama. Completed forms should be mailed not later than Dec. 31, to Parsons Corp., Consulting Engineers, P.O. Box 54802, Los Angeles, Calif. 90054. Construction is scheduled to begin in February.

**PAPUA/NEW GUINEA**—The Administration has issued tender no. A 2115 for the supply, installation and commissioning of an **automatic telegraph switching system.** Bid deadline is Jan. 25. Copies

of tender announcement and specifications are available from the Chairman, Supply and Tenders Board, P.O. Box 4141, Badili, Papua, New Guinea or on a short-term loan basis to firms located in the U.S. from the Communications Division, BDC-720 Room 4209, U.S. Department of Commerce, Washington, D.C. 20230. ★(202-967-4823)

**SPAIN**—The Government has issued a call for bids on the construction and operation of a major port to handle dry bulk cargo at Ria de Arosa, Pontevedra, in northwest Spain. The successful bidder must establish a corporation in Spain with an initial stock capital of at least 25% of the anticipated investment. The total foreign participation in the new company may not exceed 49% of the firm's capital. Construction work must start not more than eight months from the date the contract is awarded. The bid deadline is April 19. Copies of the decree (in Spanish) outlining the conditions and terms for the tender are available from the Construction, Eng., and Water Resources Div., BDC-742, U.S. Dept. of Commerce, Washington, D.C. 20230 ★(202-967-3602), and the U.S. Dept. of Commerce Field Office, 11444 Federal Bldg, 450 Golden Gate Ave., San Francisco, Calif. 94102 ★(415-556-5868). Technical and other information is available to interested parties at the issuing office: Direccion General de Puertos y Senales Maritimas (Seccion Tercera), Ministerio de Obras Publicas, Madrid.

**SWITZERLAND:** The Vekehrsbetriebe Der Stadt Zurich has issued a tender for the construction of a **16-mile double track subway system.** The bid deadline has not been set. The subway system calls for a computer operated traffic control system with a TV supervision system. The traffic control system should provide for automatic train operation, and the movement, scheduling and dispatch of trains. Copies of tender announcement and specifications are available in German from the Vekehrsbetriebe Der Stadt Zurich, Bahnofquai, 5 P.O. Box 8023, Zurich, Switzerland or on a short-term loan basis to firms located in the U.S. from the Communications-Electronics Division, BDC-720, Room 4320, U.S. Department of Commerce, Washington, D.C. 20230. (202-967-4823).

**UAR**—Supply of 25 **automatic tile making machines,** and 25 **mortar mixers & feeding** for automatic tile making machines for the Nile Delta Drainage Project: automatic tile making machines for cement pipes of 10 cm. internal diameter, 30-33 cm. long with plane edges, 1.5-2 cm. wall thickness; mortar mixers for mixing 500 kgs. cement per one cubic meter of sand per 35 gallons of water, or 3.5 gallons of water per sack of cement (sack of cement = 50 kgs.); spare parts for five years for automatic machines & recommended handling and testing equipment. Nile Delta Authority for Tile Drainage Projects, 5A Elgoheiny St., Dokki, Giza. Bid deadline Jan. 19. Tender specifications available on short term loan basis to firms domiciled in the U.S. from the General Industries Division, BDC-772, U.S. Dept. of Commerce, Washington, D.C. 20230. (202-967-5520).

# Future Construction Abroad

**ARGENTINA**—A $12 million Inter-American Development Bank loan will be applied to the construction of a **series of potable water systems in 250 small towns** of up to 8,000 inhabitants. The total cost of the program, to be carried out over three years, is estimated at $25 million. The balance of $13 million will be financed locally. The National Potable Water and Rural Sanitation Service will supervise this project. American contractors and suppliers interested in participating in the future international calls for bids may correspond directly with Ing. Raul U. Jauregui, Director of the National Potable Water and Rural Sanitation Service, 25 de Mayo 459, 4° Piso, Buenos Aires.

**CANADA**—A $2.5 million **expansion of St. Vincent's Hospital,** 33rd and Heather Sts., Vancouver, is being planned with tenders for the project to be sent out in April or May. The new reinforced concrete addition to the hospital, which will contain a 75-bed extended care unit, 20 psychiatric beds with provision for psychiatric day care, dietary department, and stores and staff locker rooms to serve the total complex, should be completed sometime in 1973. One of the partners of the architectural firm responsible for this project stated that it was being financed by the British Columbia Provincial Government. Consequently, while some preference will be given to the local procurement of supplies and equipment, interested U.S. suppliers should direct their inquiries to: Fred Brodie, Patner, Thompson, Berwick, Pratt and Partners, 1553 Robson St., Vancouver, B.C.

**CANADA**—In early September, construction started on a $1.4 million retirement lodge for senior citizens in West Vancouver. Construction should be completed about June 1972. The Construction Manager for this project stated that U.S. suppliers are welcome to bid, particularly on kitchen equipment and household furnishings, and that all inquiries should be directed to: Mr. J. R. Smith, Construction Manager, Imperial Construction Co., 1065 Clark Dr., Vancouver, B.C.

**CANADA**—**A $2.5 million townhouse project** is now in its final planning stages and construction is expected to commence in December or early January. The project will be developed on 6.6 acres of property in the Champlain Heights area near Burnaby. The project proposals call for 112 townhouse-type units of two, three and four bedrooms, and 28 one-bedroom apartment units in one, two and three story structures. The construction manager for this project stated that U.S. suppliers are welcome to bid on supplies and equipment. Inquiries should be directed to: R. Davidson, Manager, Howard S. Wright Construction Co., 853 Richards St., Vancouver, British Columbia.

**CANADA**—Work on the construction contracts on the new **Montreal International Airport** came to a standstill from Feb. 3 to early May of this year because of a jurisdictional labor dispute involving the Quebec Federation of Labor and the Confederation of National Trade Unions. As of Sept. 1, the initial drainage work and the access roads within the airport had been finished and the first runway was about 15 percent completed. A Department of Transport source says that the next construction tenders will be called in late winter or early spring, and, since the project is now six months behind schedule, contract awards will be accelerated to make up for lost time. The next important contracts to be awarded will be for the first passenger terminal and the thermal plant.

**ZAIRE (CONGO-KINSHASA)** — The Government is interested in a 1,000-mile **power transmission system** to link the Inga Dam hydro-electric complex near the Atlantic Ocean to the copper mining region of Katanga. Power requirements in Katanga are increasing rapidly as copper production grows. GECOMINES (Congolese owned, Belgian operated), SODIMICO (Japanese) and SOCOTEF (American and Congolese) are all planning to expand or begin copper production during this decade. The Congo is now looking into Inga-Katanga power transmission to help meet the power requirements of these groups, as well as the increasing requirements for the city of Lubumbashi. Thus far no studies have been made and only the roughest estimates of requirements and costs are available. Congolese engineers say that 540 mw. of additional power will be needed in Katanga by 1980. To meet that timetable, pre-engineering for an Inga-Katanga power line should begin in 1973. Cost estimates for the line are not less than U.S. $100 million. Siemens (German) and Brown-Bovari (Swiss) have already sent small teams to the Congo to visit Inga Dam, now under construction, and the copper mines. The Office of the President, in Kinshasa, is prepared to receive other visitors to discuss the transmission project. Feasibility studies, engineering and actual construction of the Inga-Katanga line are areas in which U.S. firms might participate. Interest in this project is increasing rapidly, so a timely expression of interest may prove important. Interested firms should address correspondence, in French, to: M. Barthelemy Bisengimana, Directeur, Bureau de la Presidence, Kalina, Kinshasa.

**FRANCE**—Several major French chemical firms including Mines de Potasse d'Alsace of Mulhouse, Societe Chimique de Shell-Berre of Paris and Polymer Corp. of Strasbourg, and the two largest banks in Eastern France, the Societe General Alsacienne de Banque and the Credit Industriel d'Alsace et de Lorraine have recently formed an agency to study the building of **a steam cracking installation** in the Alsace region of Eastern France. The projected steam cracking plant would be built near Strasbourg's two petroleum refineries and would be on the oil pipe line between Marseille and Strasbourg. Such a plant is considered a prerequisite for extension of the local chemical and pharmaceutical industries. The agency which will be studying the project is: Societe d'Etudes pour l'Implantation d'un Steam Cracker en Alsace

(SESCA) 14, rue de la Nuee Bleue, Strasbourg, France.

**IRAN**—The Development and Resources Corp. of Sacramento, California and Andimeshk, Iran has announced that the Khuzestan Water and Power Authority, will soon be advertising an international competitive bid contract to secure **operation and maintenance equipment for the Dez Irrigation Project.** The estimated total amount of this contract is in excess of $1 million and it is intended that the proceeds of the $30 million World Bank loan allocated in 1969 for Stage I of the Dez Irrigation Project be applied to payments under the contract. Since development and Resources prefers to deal directly with U.S. suppliers, interested firms in the U.S. should contact: Development and Resources Corp., 455 Capitol Mall, Suite 675, Sacramento, Calif. 95814. Attn: Wm. A. Price, Contract GD-200.

**JAMAICA**—The Government of Jamaica is to guarantee repayment of $10 million, interest and principal of a loan to be made to the Kingston Waterfront Hotel Co. Limited for the **construction of a 388-room hotel.** The hotel is to be constructed in Kingston and will be leased to Intercontinental Hotels Corp., a subsidiary of Pan American World Airways for a period of 25 years with the option to renew for a further 15 years. The project plans are not yet completed. Construction is tentatively set to begin by the end of this year and the construction period is expected to last for two years. *Developers:* Kingston Waterfront Hotel Co., Ltd., 54 King St., Kingston, Attn: Alistair Rodger. *Contractors:* Taylor-Woodrow International of the United Kingdom in association with a Jamaican firm to be decided. *Architects:* Michael Lisle of the United Kingdom in association with Robertson Ward Assoc., 25 Tobago Ave., Kingston 5. *Equipment Buyers:* Intercontinental Hotels Corp., a subsidiary of Pan American World Airways.

**JAMAICA**—Having completed the Independence City Housing Scheme (Phase One), West Indies Home Contractors is building **650 three-bedroom houses** at Edgewater, a part of the Portmore Development Scheme outside Kingston. The project is to be completed by September. The next project will be 200 two-bedroom units as Phase Two of Independence City. *Developer:* West Indies Home Contractors, 7 Harbour St., Kingston, Attn: Owen Matalon, Managing Director. *Architect:* David G. Kay and Associates, 13 Waterloo Rd., Kingston 10. *Contractor:* West Indies Home Contractors, same address as above.

**MALAWI**—Dr. Billy Rigbye, Director of Design, Ministry of Works and Supplies now stationed in Lilongwe, has provided new information about the **international airport planned for Lilongwe.** The airport will be constructed about 15 miles north of Lilongwe at the small hamlet of Lombadzi on the present Lilongwe to Kasungu road. The direction of the runway as now planned is 075°, but this may be altered to reduce the required earthmoving. The main runway will be 13,000 feet with a width of 150 ft. and an LCN of 120-130. There will be a 4,000 ft. grass or sealed strip at right angles to the main runway for light aircraft. An ILS system and full lighting will be installed. There will be fuel storage handled by the major oil companies with refueling by tankers. Parking areas are planned to accommodate five medium-size aircraft and one jumbo jet at the same time. The airport terminal will be similar to that at Lusaka and built to handle 500 passengers at a time. Total cost is estimated at "less than £10 million." While the complex will resemble that at Lusaka, which cost about £7 million, a factor has been added for continuing cost escalation. The figure of £10 million includes institutional housing for personnel. The cost of the terminal itself should be under L1 million with the ILS and lighting costing another £1 million. The Ministry hopes to request tenders in 1973. The target is to have the airport operational by the end of the 1976 dry season (October). The Ministry also hopes that the entire project can be handled under one contract, but it may be necessary to separate the runway.

**MEXICO**—The *San Diego Union* reports that construction will start on Sept. 9 of an **eleven-story, two hundred room Royal Inn in Tijuana.** It is expected to cost $3.6 million. The hotel will be erected on a 90,000 square-foot site just east of the Tijuana Country Club. It is expected to open next September. Royal Inns de Mexicana, a Tijuana company that is franchised by the San Diego firm, Royal Inns of America, Inc., said the project is one of several it is planning for construction in Mexican population and resort centers. The first was the Royal Inn, Ensenada, completed two years ago. Plans call for new Royal Inns in Mexicali and along the resort coast of Sinaloa.

**PAPUA-NEW GUINEA**—Highway II Project—Papua New Guinea. A transport survey of the Territory of Papua New Guinea carried out in 1969 recommended **spending A$109 million (A$1.00 = U.S. $1.12) on roads** over a five-year period. The survey recommended new road links between Lae and Madang, between Mt. Hagen and Mendi, and between Madang and the Highlands. The survey proposes: construction of 333 miles of interregional roads, A$31 million; construction and upgrading of 382 miles of district trunk roads, A$22 million; feeder roads, A$8 million; urban roads, A$6 million; rural development roads, A$10 million; road maintenance, A$29 million; miscellaneous, A$3 million. In this connection, the Department of External Territories recently reported that "The highway project agreements negotiated with the World Bank and International Development Assn. in June 1970 included funds for detailed engineering of the Bundi route from Madang to Kundiawa. The estimated cost is about A$1 million. The work has been divided into two sections, with the Commonwealth Department of Works completing design and documentation between Madang and Yakumbu with a consultant responsible for the balance. The scope of the work to be done by consultants includes—preliminary location, photography, surveys and pegging; terrain evaluation and stability, materials, foundations and hydrological investigations; road, bridge, drainage and pavement designs; contract documents and notes for guidance in construction; a review of the preliminary economic analysis made in the UNDP transport survey report. They are currently finalizing details of a contract with Vallentine, Laurie and Davies. The Administration has proposed that the contract require definition of recommendations by June 1972, with final completion of the consultants' task by the end of 1972." The overall highway project should provide significant opportunities for services of U.S. engineering and construction firms.

**PARAGUAY**—Plans for development of Route 9, the Carlos Antonio Lopez Highway—better known as the Trans-Chaco Road—are going ahead. Construction will include **improving and paving 427 kilometers of highway** from Villa Hayes, just north of Asuncion, to a point north of Filadelfia. The entire project will cost about $33 million, with actual construction worth about $29 million. Financing is being arranged primarily by the Inter-American Development Bank which is furnishing 80% of the total through a loan. The remaining 20% will be raised locally. The project is to be divided into three sections. A call for prequalification applications is expected in November, and calls for bids on each of the three sections should go out to prequalified firms in March. If all goes as expected, contracts should be let in June-September 1972, and construction will then begin in October-November. Contracts for preliminary engineering and design studies for the Trans-Chaco Road were let in March. These were awarded to a consortium of Consultec, SRL and Edwards and Kelcey. Consultec is an association of very prominent Paraguayans and Edwards and Kelcey is a prominent U.S. firm with headquarters at 8 Park Pl., Newark, N.J. Further information may be obtained from: Senor Ing. Juan H. Pettengill, Director General de ialidad, Ministerio de Obras Publicas y Communicaciones, Calle General Diaz y Alberdi, Asuncion, Paraguay.

## Future Construction Abroad Summary Available

A quarterly summary of future construction projects abroad, contract award stories and significant foreign government tenders published in *Commerce Today* and *Commerce Business Daily* during July, August and September is available to U.S. firms from Trade Opportunities Staff, BDC-584, Room 4813, U.S. Department of Commerce, Washington, D.C. 20230.

A pre-addressed mailing label should be included with the request to facilitate processing and mailing.

The summary, which may also be reviewed at any of the 42 Commerce Field Offices listed on the inside back cover of this issue, alphabetically lists project summaries by country in five distinct classes: airport, seaport, railroad and highway projects; hydro and thermal electric plant and irrigation projects; hospital, hotel and housing projects; industrial plant projects; and comprehensive development projects. Whenever possible, names of contractors and responsible agencies are cited, as well as original publication dates.

A limited number of the second quarter summary are also available upon request as long as the supply lasts.

PERU—The Peruvian Earthquake Relief Agency, CRYRZA, is undertaking the **construction and reconstruction of access and internal roads** of the Callejon de Huaylas, in the Department of Ancash, Peru. This project encompasses the improvement or new construction of approximately 400 kilometers of roads for two-way traffic in mountainous and undulating terrain. Funds for the construction and supervision of the works are made available through a $33 million World Bank loan. The program will be executed in several phases as follows: (1) In September, a bid was solicited for 25 kilometers of two-way paved road between Huaraz and its airport, located in Anta, in the Callejon de Huaylas. The approximate cost of this project will be $2.5 million (100 million Peruvian Soles); and (2) In the first quarter of 1972 other bids for spans of road with similar characteristics will follow when detailed engineering studies have been completed. The entire program should be completed by September 1975. Information and documentation required for the first bid were to have been delivered by Sept. 18 by an accredited representative to the following address: Oficina de la Comision de Rehabilitacion de Transportes y Comunicaciones, Ministry of Transportation and Communication, Avenida 28 de Julio, Lima, Peru. Interested companies may obtain a copy of the requirements for prequalification to participate in upcoming work from the Construction, Engineering and Water Resources Division, BDC-742, U.S. Dept. of Commerce, Washington, D.C. 20230 (202-967-3602), and the U.S. Dept. of Commerce Field Office, 11444 Federal Bldg., 450 Golden Gate Ave., San Francisco, Calif. 94102 (415-556-5868).

SAUDI ARABIA — **Officials at the Dhahran International Airport outlined plans for long term expansion of airport facilities.** The basic motivation behind these considerations is the anticipated total replacement (in two to three years) of the 707/DC-8/VC-10 generation of aircraft with the 747/Tristar/DC-10 on the world's east-west aviation routes. Although very much in the formative stage, the expansion plans presently being discussed call for: *A New terminal building.* The United Nations ICAO advisory team at the airport believes the present building to be inadequate for 747 traffic. They have recommended construction of a new international terminal and conversion of the present facility into a domestic terminal. *Expansion of public utilities.* Airport water and electricity supply is presently over-taxed. No expansion of airport facilities is possible without first substantially expanding the available public utilities. *Construction of a second runway.* The present runway can take jumbo jets. However, increasing traffic at the airport is making it imperative that military aircraft have their own runway. *New cargo terminal.* Airlines serving Dhahran consider the present cargo sheds inadequate for today's air cargo volume. *New control tower* (probable). U.N. officials estimate the cost of the total improvement plan should run at about $5.1 million. As the first stage of the project the airport administration has just contracted with the Netherlands Airport Consulting Co. (NACO) to draw up a comprehensive master plan and pre-engineering (feasibility) study.

## Bidders Must Prequalify For Mozambique Road Project

The Mozambique Highway Board has issued a notice for firms to prequalify to bid on construction of a 1,000-kilometer highway from Vila Paiva de Andrada to the Rio Lurio, including an 11-meter roadway bed and 7-meter wide asphalt surfacing, installation of highway signs, and construction of culverts and bridges (including a 2,390-meter bridge over the Zambezi River, near Vila Fontes). All construction work is to be completed on a bid basis within 3 to 4½ years. The estimated cost is $38.5 million.

Only bona fide firms of acceptable technical and financial standing may apply to the two agencies involved (Junta Autonoma de Estradas de Mozambique, Caixal Postal 2120, Lourenco Marques, or Ministerio do Ultramar, Direccao-Geral de Obras Publicas e Communicacoes, Avenida Ilha da Madeira, Restelo, Lisbon 3, Portugal) by a letter with supporting documents as to their competency before December 31. (Correspondence is preferred in Portuguese.) Details may be obtained in Lourenco Marques, Lisbon, and from Portuguese diplomatic missions abroad. Foreign firms will eventually have to associate themselves with a Portuguese firm or firms to be eligible.

This is the first phase of a nine-year New Highway Plan (1971-79) covering 10,000 kilometers of new asphalted all-weather highways and ancillary works at an estimated cost of 10.5 billion escudos ($367.5 million). Prequalifications to bid are invited from all firms or groups of firms, Portuguese and foreign, interested in the Mozambique highway extension program, on the basis of a deferred payment system for part of the estimated costs.

A copy of a report on the overall project, prepared by the American Consulate in Lourenco Marques, is available from the Construction, Eng., and Water Resources Div., BDC-742, U.S. Dept. of Commerce, Washington, D.C. 20230 (202-967-3602), and the Commerce Field Office, 11444 Federal Bldg., 450 Golden Gate Ave., San Francisco, Calif. 94102 (415-556-5868).

## Czech Paper Trust Seeks Equipment, Raw Materials

The Paper & Cellulose Trust of Czechoslovakia wants to buy equipment for continuous measuring of paper web thickness, measuring and control of paper stock consistency under one percent; pumps to transport long-fibered stock without spinning of fibers; micro-fibers and carbon micro-fibers for paper-making. Interested U.S. firms should contact Jaroslav Jahoda, Deputy Dir., Vyzkumny a Vyvojovy Poloprovoz Prumyslu Papiru a Celulozy, Steti, Czechoslavakia.

## Venezuela Prequalifies Bidders On Navigational Aids

Venezuela's Ministry of Public Works has opened prequalification procedures on two tenders L-71-MIQ-1 and L-71-MIQ-3. Companies interested in bidding on L-71-MIQ-1 covering DVOR and DME must present their qualifications by 10 a.m., Jan. 10 at Oficina Ministerial Del Aeropuerto De Maiquetia, Zona Rental, Plaza Venezuela Caracas. Those with interest in bid L-71-MIQ-3 for ILS must present their qualifications at the same place by 10 a.m., Jan. 28.

# Visiting Buyers And Officials

ARGENTINA—Norberto Turdo, Director, Matafuegos SACIAF e I, Cuenca 2259, Buenos Aires, interested in contacting suppliers of **machinery for making fire extinguishers**, especially used cylinder spinning machines, and meeting importers of fire fighting equipment. Dec. 18 via Los Angeles for two weeks. c/o 5205 Middlecrest Rd., Palos Verdes Peninsula, Calif. 90724. Itinerary: Los Angeles, Chicago, New York. WTD 10/71.

DENMARK—Ole Flensted, representing Gronlands Indkobsring A/S, 28-B H. C. Orstedsvej, DK-1879 Copenhagen V., interested in agency for **surplus army wearing apparel**, particularly parka coats and bomber jackets. Dec. 12 via New York for several days. c/o Hotel Algonquin, 59 W. 44th St., New York, N. Y. 10036. Itinerary: New York. WTD in preparation.

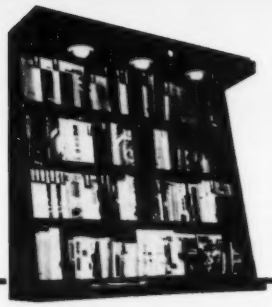
GERMANY—Reiner Roosen, Hanauer Stempelfabrik Schwachhoefer & Opstelten, 21 Schoenbornstrasse or P.O. Box 206, 6452 Steinheim am Main, interested in manufacture of **rubber stamps, rubber stereos, signs, engraving and etching,** and requesting technical information on advanced methods and materials for manufacture of above products, chiefly rubber stereos for printing of corrugated papers. Dec. 19 via New York for 20 days. c/o Kenneth Dyson/Angela Doyle, Box 235, Port Even, N.Y. 12466. Itinerary: New York. WTD in preparation.

ISRAEL—Moshe Podhorzer, Manager, Tempo Combined Enterprises Yerucham Ltd., Industrial Zone, Azur/Holon, interested in **automotive safety devices, pneumatic conveyor systems, refrigeration equipment and machinery, electronic products for industry** and in visiting plants to observe equipment in operation. First week Dec. via New York for one month or longer. c/o Commercial Attache, Israel Consulate General, 11 E. 70th St., New York, N.Y. 10021. Itinerary: to be arranged after arrival. WTD 6/69 on Tempo Glass Works.

# New Trade Lists

*The Bureau of International Commerce has published the following Trade Lists of which mimeographed copies may be obtained by firms domiciled in the United States from BIC-924, Department of Commerce, Washington, D.C. 20230, and from Department of Commerce Field Offices. The price is $1.00 per list for each country.*

**Business Firms—Afghanistan**, October.
**Business Firms—Mozambique**, October.
**Business Firms—Pacific Islands**, October.
**Business Firms—Uganda**, October.
**Business Firms—Uruguay**, October.
**Business Firms—Yugoslavia**, October.



# New Publications

*When ordering any publication, indicate title and series designation, if indicated, and make checks or money orders payable to the Superintendent of Documents. Orders should be sent to the U.S. Department of Commerce, Washington, D.C. 20230, or to any of its field offices.*

## UNITED STATES TRAVEL SERVICE

**Festival USA 1972.** 39pp. 45¢. The listing includes more than 500 events occurring in the United States in 1972.

## DOMESTIC AND INTERNATIONAL BUSINESS

### BUREAU OF DOMESTIC COMMERCE

**Copper.** Quarterly industry report. Vol. 18, No. 1. Annual subscription $1 (25¢ more for foreign mailing). Single copy 25¢.

### BUREAU OF INTERNATIONAL COMMERCE

**Export control bulletin—supplement to export control regulations** (ECB-OEC-52). Single copy 40¢.

#### Foreign Economic Trends

Foreign economic trends and their implications for the United States are commercial reports from U.S. embassies abroad. They are available immediately upon receipt. This series of 100 to 150 reports a year presents current business and economic developments in every country that offers a present or potential market for U.S. goods. Annual subscription $15 ($6 more for foreign mailing). Single copy 10¢.

**Brazil** (ET 71-103). 12pp.
**Angola** (ET 71-104). 14pp.
**Canada** (ET 71-105). 8pp.
**Colombia** (ET 71-106). 8pp.
**Greece** (ET 71-107). 16pp.
**Honduras** (ET 71-108). 12pp.
**El Salvador** (ET 71-109). 12pp.
**Ceylon** (ET 71-111). 8pp.
**Saudi Arabia** (ET 71-112). 12pp.
**Tunisia** (ET 71-113). 12pp.
**Mexico** (ET 71-114). 12pp.
**Iceland** (ET 71-115). 12pp.
**Democratic Republic of the Congo (Zaire)** (ET 71-116). 12pp.
**Korea** (ET 71-117). 12pp.

#### International Marketing Information Service

*Exhibitor's Export Market Guide*

**Japanese industry seeks advanced metal surface treatment equipment** (IMIS 71-042). 4pp. 10¢.

**Good demand for U.S. pollution control equipment in expanding German market** (IMIS 71-043). 4pp. 10¢

## ECONOMIC AFFAIRS

### BUREAU OF THE CENSUS

**Districts of the 93rd Congress.** These reports are included in a series of separate State reports presenting 1970 population and housing data and recent election statistics for districts of the 93rd Congress:

**Arkansas** (CDD-93X-3). 4pp. 25¢.

**Iowa** (CDD-92X-13). 4pp. 25¢.

**Metropolitan area statistics**—A reprint from the Statistical Abstract of the United States 1971. Section 33. 72pp. 35¢.

**Small area data notes,** Vol. 6, No. 11. 10pp. 10¢.

#### Agriculture

*1969 Census of Agriculture*

The 1969 Census of Agriculture provides data for all farms. These data are now being issued, by county, with a State summary of the individual county reports of that State. When all individual county and State reports have been issued, a United States summary report will be released. Each report 8pp. 25¢. Price for complete set of county reports (3,071 reports), $792. Price for complete set of State summary reports, including U.S. summary (51 reports), $12.75. The following State and County reports are now available:

**Ohio** (89 reports). $22.50.

**Washington** (40 reports). $10.75.

#### Construction and Housing

**Housing completions: August 1971** (C22-71-8). Annual subscription $1. Single copy 10¢.

**Construction expenditure of State and local Governments: July-September 1971** (GC71 No. 3). 4pp. 10¢.

**New one-family homes sold and for sale: August 1971** (C25-71-8). Annual subscription $3. Single copy prices: Monthly, 10¢, and annual, $1.

**Value of new construction put in place: September 1971** (C30-71-9). Annual subscription $2.50, including monthly and annual supplement. Single copy 25¢.

**Housing vacancies** (Series H-111. No. 66). Annual subscription (Series H-111 and H-121, combined), $1.50, foreign mailing $2. Vacant housing units in the United States: third quarter 1971. Single copy 20¢.

*1970 Census of Housing*

Detailed Housing Characteristics:

**Montana** (HC(1)-B28). 135 pp. $1.50.

Reports in this series present statistics from the 1970 census by blocks on general characteristics of housing units and population:

**Birmingham, Ala. urbanized area** (HC(3)-1). 106pp. and 22 maps. $5.50.

**Stamford, Conn. urbanized area** (HC(3)-4). 33pp. and 10 maps. $2.25.

**Bridgeport, Conn. urbanized area** (HC(3)-34). 64pp. 16 maps. $3.

**Meriden, Conn. urbanized area** (HC(3)-37). 26pp. and 10 maps. $1.75.

**New Britain, Conn. urbanized area** (HC(3)-38). 26pp. and 7 maps. $2.

**Norwalk, Conn. urbanized area** (HC(3)-40). 30pp. and 9 maps. $2.

**Waterbury, Conn. urbanized area** (HC(3)-42). 33pp. and 11 maps. $2.25.

**West Palm Beach, Fla. urbanized area** (HC(3)-53). 73pp. and 19 maps. $3.75.

**Selected areas in Georgia** (HC(3)-61). 22pp. and 4 maps. $1.25.

**Champaign-Urbana, Ill. urbanized area** (HC(3)-67). 28pp. and 5 maps. $1.50.

**Pittsfield, Mass. urbanized area** (HC(3)-115). 22pp. and 5 maps. $1.25.

**Ann Arbor, Mich. urbanized area** (HC(3)-118). 34pp. and 10 maps. $2.

**Bay City, Mich. urbanized area** (HC(3)-119). 30pp. and 3 maps. $1.

**Jackson, Mich. urbanized area** (HC(3)-123). 28pp. and 7 maps. $1.75.

**Kalamazoo, Mich. urbanized area** (HC(3)-124). 33pp. and 7 maps. $1.75.

**Selected areas in Missouri** (HC(3)-139). 31pp. and 6 maps. $1.50.

**Charlotte, N.C. urbanized area** (HC(3)-165). 54pp. and 11 maps. $2.50.

**Hamilton, Ohio urbanized area** (HC(3)-181). 24pp. and 7 maps. $2.25.

**Lima, Ohio urbanized area** (HC(3)-182). 28pp. and 8 maps. $1.75.

**Steubenville-Weirton, Ohio-W. Va. urbanized area** (HC(3)-186). 20pp. $2.75.

**Oklahoma City, Okla. urbanized area** (HC(3)-191). 116pp. and 48 maps. $8.

**Johnstown, Pa. urbanized area** (HC(3)-202). 35pp. and 8 maps. $1.75.

**Wilkes-Barre, Pa. urbanized area** (HC(3)-208). 45pp. and 12 maps. $2.25.

**Chattanooga, Tenn.-Ga. urbanized area** (HC(3)-218). 58pp. and 11 maps. $2.50.

**Nashville-Davidson, Tenn. urbanized area** (HC(3)-221). 69pp. and 29 maps. $6.

**Brownsville, Tex. urbanized area** (HC(3)-227). 23pp. and 5 maps. $1.50.

**Midland, Tex. urbanized area** (HC(3)-238). 33pp. and 5 maps. $1.50.

**Norfolk-Portsmouth, Va. urbanized area** (HC(3)-256). 105pp. and 30 maps. $6.50.

**Roanoke, Va. urbanized area** (HC(3)-258). 43pp. and 8 maps. $1.75.

**Spokane, Wash. urbanized area** (HC(3)-261). 76pp. and 9 maps. $2.50.

**Tacoma, Wash. urbanized area** (HC(3)-262). 70pp. and 13 maps. $2.75.

**Charleston, W. Va. urbanized area** (HC(3)-264). 41pp. and 12 maps. $2.25.

**Selected area in West Virginia** (HC(3)-267). 23pp. and 2 maps. $1.

**Kenosha, Wis. urbanized area** (HC(3)-269). 28pp. and 6 maps. $1.50.

**Madison, Wis. urbanized area** (HC(3)-270). 40pp. and 9 maps. $2.

**Racine, Wis. urbanized area** (HC(3)-272). 29pp. and 6 maps. $1.50.

### Distribution and Services

**Weekly retail trade. Estimated weekly retail sales of retail stores in the United States week ending Nov. 20** (CB 71-370). 2pp. 10¢.

**Monthly retail trade: August 1971** (BR 71-8). 22pp. Single copy 25¢.

**Monthly wholesale trade: September 1971** (BW-71-9). Annual subscription $1.50. Single copy 15¢.

*1967 Census of Business*

Wholesale Trade—Subject Report:

**Warehouse space, warehouse equipment, and delivery equipment** (BC67-WS5). 82pp. 75¢.

### Foreign Trade

**General imports—cotton manufactures: September 1971** (FT 130-71-9). Annual subscription $1. Single issue 10¢.

**Imports—commodity by country: August 1971** (FT 135-71-8). Annual subscription $21 ($5.25 more for foreign mailing). Single copy $1.75.

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### Population

**Characteristics of the low-income population 1970** (Series P-60, No. 81). 103pp. $1. This report presents social and economic statistics for the population of the United States below the low-income level in 1970, based on the March 1971 Current Population Survey.

*1970 Census of Population*

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**North Carolina** (PC(1)-B35). 150pp. $1.50.

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*1970 Census of Population and Housing*

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**OMNITABII user's reference manual** (Tech. Note 552). 264pp. $2. OMNITAB II, a highly user-oriented system for a large computer, is designed to make computing easy, accurate and effective, particularly for persons who are not programmers.

**ARPA-NBS program of research on high temperature materials and laser materials, reporting period January 1 to June 30, 1971** (Tech. Note 703). 39pp. 50¢.

**JANAF thermochemical tables, second edition** (NSRDS-NBS 37). Supersedes PB168-370 and addenda 1, 2, and 3. 1141pp. $9.75. This Monograph is the second edition of the JANAF thermochemical tables.

**Selected values of chemical thermodynamic properties—Tables for the alkaline earth elements** (Elements 92 through 97 in the Standard Order of Arrangement) (Tech. Note 270-6). 119pp. $1.25. These tables are a continuation of the comprehensive revision of NBS Circular 500.

### NATIONAL TECHNICAL INFORMATION SERVICE

*Order the following reports on Government-sponsored research from: National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22151. Make check or money order payable to National Technical Information Service. Price for each document is $3 (microfiche 95¢) unless otherwise specified.*

**Environmental pollution: noise pollution noise effects on human performance** (AD-729 850). Defense Documentation Center, Alexandria, Va., 101pp. DDC bibliography (with abstracts).

**Economic information for environmental quality management** (PB-203 784). Consortium of Universities, Washington, D.C., for the Urban Mass Transportation Admin., 20pp.

The following reports providing background for the National Water Commission's deliberations on the subject of national water policy are available:

**Interstate water compacts. The interstate compact and federal-interstate compact** (PB-202 998). Paper copy $6 (microfiche 95¢), 490pp.

**The federal-state regional corporation. Additional alternative arrangements for river basins and other regions: the federal-state regional government corporation** (PB-202 997). National Water Commission, Arlington, Va., 83pp.

**Department of Transportation report to the Secretary: general aviation safety** (PB-202 928). Assistant Secretary for Safety and Consumer Affairs, Washington, D.C., 36pp. Discusses existing regulatory policies and practices, organizational matters, and other factors relating to general aviation, primarily with respect to operation of small airplanes.

**Study of container interchange and pooling facilities in United States export-import traffic** (PB-203 130). A. T. Kearney and Co., Inc., New York, N.Y. for the Dept. of Transportation, 144pp.

**Vuilleumier refrigerator analysis: low temperature refrigerator design optimization** (AD-724 770). By Cryomech Inc., Jamesville, N.Y. for the U.S. Army. 74pp. Investigates the influence that non-ideal processes and thermo-mechanical losses have on performance. Report determines whether a linear independent displacer motion improves performance over sinusoidal motion.

**Accelerating utilization of new materials** (AD-727 178). By National Materials Advisory Board for the U.S. Army. 108pp. Identifies factors that promote or inhibit use of new materials, such as availability, economics, techniques for selection, fabrication technology, and design practices. Primary emphasis is on structural materials.

**Applied criteria for municipal water rate structures final report** (PB-202 013). By the U. of Florida for the Office of Water Resources Research. 376pp. Paper, $6.

**Same title: handbook** (PB-202 014). 82pp.

**Development of a high power density silver oxide-zinc liquid electrode bipolar primary battery** (AD-727 126). By P. L. Howard Assoc., Centreville, Md., for the U.S. Navy. 33pp.

**Apparatus for a continuous process in preparation of distilled water** (AD-728 100). Army Electronics Command. 14pp.

**Recovery of phosphates and metals from waste phosphate sludge by reduction-sinter processes** (PB-201 891). U.S. Bureau of Mines. 14pp.

The following reports concern problems and requirements for maintenance and repair of safety components and systems for vehicles weighing less than 8,000 pounds:

**Maintainability and repairability of vehicles in use, Vol. I: summary report** (PB-202 531). By Booz, Allen Applied Research, Bethesda, Md. for the National Highway Traffic Safety Admin. 44pp.

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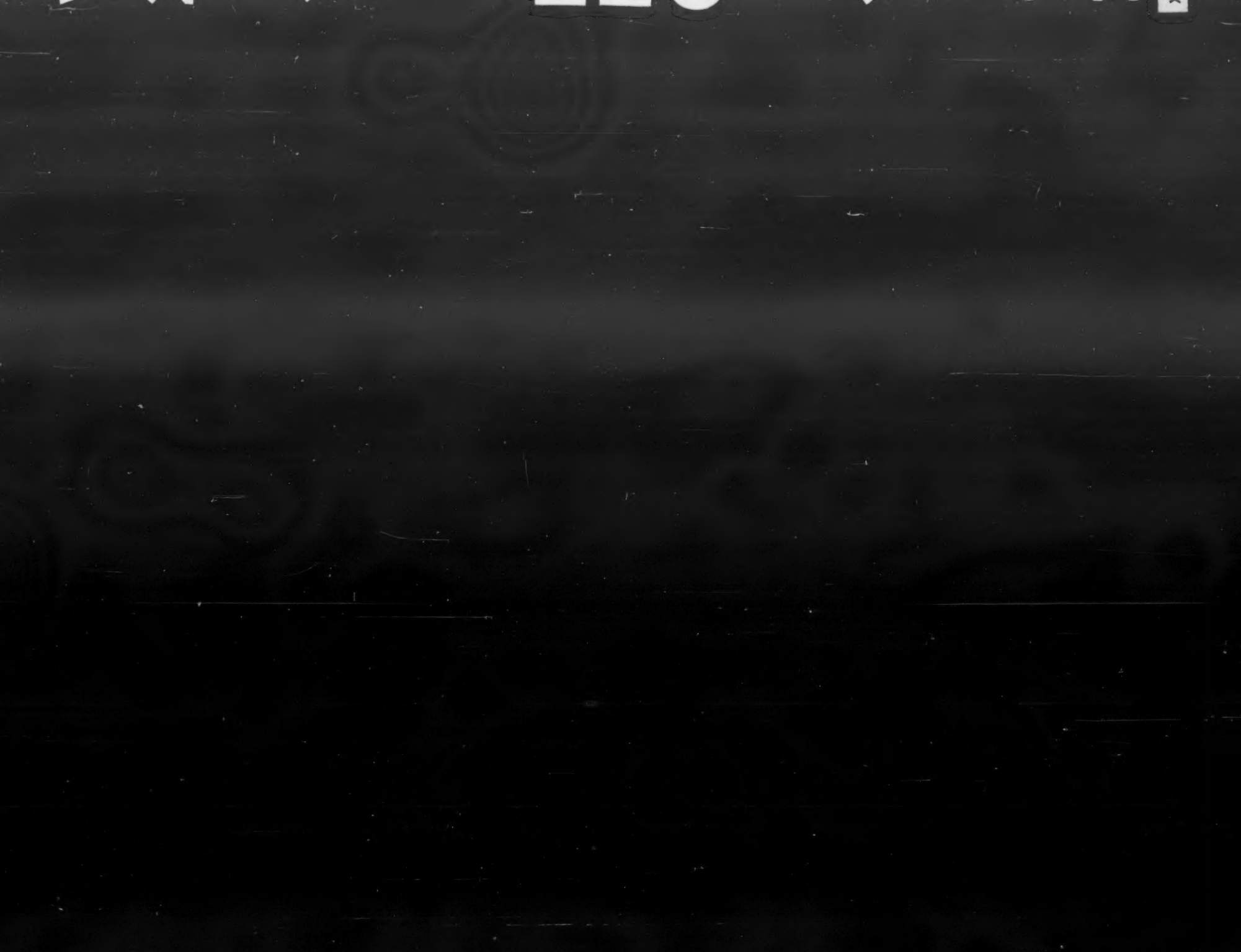
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